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As filed with the Securities and Exchange Commission on December 3, 2010
Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

FLUIDIGM CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	**3826**	**77-0513190**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification Number)**

7000 Shoreline Court, Suite 100
South San Francisco, CA 94080
(650) 266-6000
(Address, including ZIP code, and telephone number, including area code, of registrant's principal executive offices)

Gajus V. Worthington
President and Chief Executive Officer
7000 Shoreline Court, Suite 100
South San Francisco, CA 94080
(650) 266-6000
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, as amended, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒ (Do not check if a smaller reporting company)	Smaller reporting company	☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	**Proposed Maximum Aggregate Offering Price(1)**	**Amount of Registration Fee(2)**
Common Stock $0.0035 par value	$86,250,000	$6,149.63

(1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act.
(2) Calculated pursuant to Rule 457(o) under the Securities Act based on an estimate of the proposed maximum offering price.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to such Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is declared effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, Dated December 3, 2010

Shares
Common Stock

This is the initial public offering of Fluidigm Corporation. We are offering shares of our common stock. We anticipate that the initial public offering price will be between $ and $ per share. We intend to list our common stock on The NASDAQ Global Market under the symbol "FLDM."

Investing in our common stock involves risks. See "Risk Factors" beginning on page 10.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

	Per Share $	Total $
Public offering price	$	$
Underwriting discounts and commissions	$	$
Proceeds, before expenses, to Fluidigm Corporation	$	$

We have granted the underwriters the right to purchase up to additional shares of common stock to cover over-allotments.

Deutsche Bank Securities **Piper Jaffray**

The date of this prospectus is , 2011

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You should rely only on the information contained in this prospectus and in any free writing prospectus prepared by or on behalf of us. We have not, and the underwriters have not, authorized anyone to provide you with information different from, or in addition to, that contained in this prospectus or any related free writing prospectus. This prospectus is an offer to sell only the shares offered hereby but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

Dealer Prospectus Delivery Obligation

Through and including , 2011 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

For investors outside the United States: Neither we nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.

PROSPECTUS SUMMARY

This summary highlights information contained in greater detail elsewhere in this prospectus. This summary may not contain all the information that you should consider before investing in our common stock. You should read the entire prospectus carefully, including "Risk Factors" beginning on page 10 and our consolidated financial statements and related notes included elsewhere in this prospectus, before making an investment decision. Unless otherwise indicated, the terms "Fluidigm," "we," "us" and "our" refer to Fluidigm Corporation.

Fluidigm Corporation

Overview

We develop, manufacture and market microfluidic systems for growth markets in the life science and agricultural biotechnology, or Ag-Bio, industries. Our proprietary microfluidic systems consist of instruments and consumables, including chips and reagents. These systems are designed to significantly simplify experimental workflow, increase throughput and reduce costs, while providing the excellent data quality demanded by customers. In addition, our proprietary technology enables genetic analysis that in many instances was previously impractical. We actively market three microfluidic systems including eight different commercial chips to leading pharmaceutical and biotechnology companies, academic institutions, diagnostic laboratories and Ag-Bio companies. We have sold systems to over 200 customers in over 20 countries worldwide.

To achieve and exploit advances in life science research, Ag-Bio and molecular diagnostics, laboratories need robust systems that deliver increased throughput and simpler workflows at decreased costs. Our microfluidic systems are designed to overcome many of the limitations of conventional laboratory systems by integrating an increasing number of fluidic components on a single microfabricated chip. Our technology enables our customers to perform and measure thousands of sophisticated biochemical reactions on samples smaller than the content of a single cell, while utilizing minute volumes of reagents and samples. Similarly, for next generation DNA sequencing, our systems enable rapid preparation of multiple samples in parallel at low cost.

We have successfully commercialized our BioMark and EP1 systems for genetic analysis and our Access Array system for next generation DNA sequencing sample preparation. We have grown our revenues from $6.4 million in 2006, to $25.4 million in 2009 and $23.2 million in the nine months ended September 30, 2010, during which time our product margin has increased from 30% in 2006, to 51% in 2009 and to 62% for the nine months ended September 30, 2010. Researchers and clinicians have successfully employed our products to help achieve breakthroughs in a variety of fields, including genetic variation, cellular function and structural biology. These include using our microfluidic systems to help detect life-threatening mutations in patients' cancer cells, discover cancer associated biomarkers, analyze the genetic composition of individual stem cells, identify fetal chromosomal abnormalities and assess the quality of agricultural seed products. We believe our Access Array system resolves a critical workflow bottleneck that exists in all commercial next generation DNA sequencing platforms. We expect that the versatility of our microfluidic technology will enable us to develop additional applications across a wide variety of markets.

We attribute our success and continued growth prospects to the following:

- *Disruptive and Enabling Technology*. Our microfluidic systems, which are broadly compatible with existing lab equipment and chemistries, enable users to perform 24 times more gene expression experiments than conventional microplate systems, at one time and in nanoliter volumes, delivering meaningful improvements in cost, capability, time and accuracy over conventional methods of laboratory and industrial research. In addition, our technology enables scientists to perform experiments that we believe are impractical using conventional systems, such as digital PCR experiments, where our systems enable users to perform 36,960 simultaneous reactions on a single chip.

- *Commercially Validated High Margin Business Model*. We have an installed base of over 250 instruments, which generate high margin recurring revenue from consumables, including chips and reagents. Our product margins are supported by our highly efficient manufacturing operations that are based in Singapore and take advantage of the skilled workforce, supplier and partner networks and government support available there.
- *Leadership Positions in Multiple High Growth Markets*. We believe our microfluidic systems are well positioned to address numerous applications in the life science and Ag-Bio markets, including single cell genomics, digital PCR, agricultural genotyping and sample preparation for next generation DNA sequencing.
- *Significant Growth Opportunities in Additional Markets*. Researchers have successfully used our microfluidic systems in such diverse fields as immunoassays, high throughput drug screening, chemical synthesis, pharmacogenomics, systems biology, synthetic biology, stem cell research, cell culture and cellular assays. Our proprietary technology is broadly applicable to biotechnology automation and could be further developed for a wide variety of additional applications, including molecular diagnostics. Through further expansion of our assay and reagent offerings, we intend to provide more comprehensive solutions across all of our target markets.
- *Strong Research and Development Capabilities and Intellectual Property Position*. We are a pioneer in the development of microfluidic systems and have a demonstrated ability to advance systems from concept through commercialization. We have developed an extensive portfolio of intellectual property, including more than 110 issued U.S. patents and 220 patent applications pending worldwide either owned by or licensed to us.
- *Well-Published and Loyal Customer Base that Expands Market Awareness of our Products.* Since January 2009, users of our systems have published over 60 peer-reviewed articles regarding experiments using our technology. We actively market our products to thought leaders in their respective fields and have found references from existing customers to be an important factor in marketing our solutions to prospective customers.

Our Target Markets

The current markets for our products include life science research and Ag-Bio. Total expenditures in the life science research and Ag-Bio markets described below are projected to exceed $4.3 billion by 2015. In addition, we are developing products for use in molecular diagnostics and other markets.

Life Science Research

Our primary area of focus within life science research is genomics, the study of genes and their functions. We are currently focused on the following applications:

- *Gene Expression Analysis*. Measures the activity of genes to identify genetic variations that may correspond to predisposition of disease or response to therapeutics;
- *Genotyping*. Determines DNA sequence variants across individual genomes to assess the correlation of specific genotypes to physical traits of interest;
- *Digital PCR*. Discretely quantifies the amount of nucleic acid present in a sample, facilitating assays that require much greater precision than currently provided by conventional PCR techniques;
- *Single Cell Analysis*. Performs gene expression analysis on single cells to further understand how biological systems operate at the cellular level; and
- *Sample Preparation for Next Generation DNA Sequencing*. Isolates, amplifies and tags target molecules to simplify library preparation, increasing the efficiency of DNA sequencing platforms, for applications such as targeted resequencing.

Agricultural Biotechnology

Industrial customers in Ag-Bio typically analyze the genomes of tens of thousands to hundreds of thousands of seeds or livestock annually in cost-sensitive production environments. Commercially viable genetic analysis tools in Ag-Bio must be inexpensive, easy to use and provide extremely high throughput.

Molecular Diagnostics

Molecular diagnostic tests are used in clinical practice to diagnose, classify or monitor a disease; determine a patient's susceptibility to a disease; or monitor a patient's response to therapy, by detecting one or more biomarkers in a patient sample. Within molecular diagnostics, our initial area of focus is in non-invasive prenatal diagnostics, or NIPD, for fetal aneuploidies, for which the most reliable diagnostic tests currently available are invasive and carry significant risks to the fetus. In collaboration with Novartis Vaccines & Diagnostics, Inc., or Novartis V&D, we are developing a microfluidic system to target this application.

The Fluidigm Solution

Our proprietary microfluidic systems are designed to significantly simplify experimental workflow, increase throughput, reduce costs, provide excellent data quality and in many instances enable genetic analysis that was previously impractical. Our microfluidic systems empower researchers and commercial customers to rapidly perform significantly more experiments or prepare significantly more samples—all at one time and in nanoliter volumes—with a combination of speed and accuracy that we believe cannot be achieved with other systems. Our systems deliver these advantages through the integration of sophisticated nanoliter fluid handling in an easy-to-use format that is compatible with most existing laboratory workflows and chemistries. Our systems are used in existing and emerging life science research and Ag-Bio markets, and we believe there are significant growth opportunities in additional markets.

We believe that our microfluidic systems have a number of compelling advantages over conventional microplate systems and other competing platforms including:

- *Data Quality*. Our microfluidic systems provide exceptionally high quality data. In genotyping, our systems achieve greater than 99% call rate and call accuracy. For gene expression, our systems achieve 6 orders of magnitude of dynamic range with inter- and intra-chip reproducibility at correlation coefficients greater than 0.99.
- *Improved Throughput*. Our base BioMark system can generate over 27,000 gene expression data points per day and high throughput configurations of our system can generate over 110,000 data points per day, with a time to first result measured in hours. Some competing systems may offer comparable data points per day, but may take up to a week for first results. Other systems offer comparable time to first result, but produce fewer data points per day, often with lower data quality. Our improved throughput reduces the time and cost associated with complex experiments and expands the number and range of experiments that may be conducted.
- *Ease of Use*. Loading our 96.96 Dynamic Array chip requires 192 pipetting steps as compared to 18,432 steps required to load the number of 384 well microplates required for the same experiment. Difficulties encountered with some competing systems include manual sample loading and chip alignment that often results in lower throughput. We believe our microfluidic systems' efficient workflow reduces time, cost and potential for error.
- *Flexibility*. Our chips are built on input frames that are compatible with most commonly used laboratory systems, including existing robotic pipetting systems, bar code readers, plate handling systems and other equipment. Our chips are also designed to work with standard chemistries, including TaqMan and other reagents. In addition, our chips give researchers the flexibility to develop and load their own assays, unlike some competing products that can be used only to analyze specific genes or that are supplied pre-configured with fixed content.

- *Nanoliter Precision*. Our microfluidic systems allow users to dispense samples and reagents in microliter volumes which are automatically partitioned, combined or mixed in nanoliter and sub-nanoliter volumes. In addition to cost and workflow benefits, this capability makes it practical for users to conduct certain high sensitivity, low volume techniques, such as digital PCR and single cell analysis.
- *Cost Effectiveness*. We believe our high throughput systems offer a compelling cost benefit for high volume users. Our systems consume reagents in nanoliter volumes, have the ability to conduct thousands of parallel experiments on one chip and offer customers the flexibility to use lower cost reagents as needed.

Products

We provide complete microfluidic systems consisting of instruments and consumables, including chips and reagents. Our systems are easily incorporated into our customers' laboratory environments and analysis workflow. For example, our chips are the same size and shape as standard 384 microplates and other chip consumables, which facilitates the loading and handling of our chips by standard laboratory equipment. Each of our chips includes an elastomeric, or rubber-like, core that contains an extensive network of microfluidic components that deliver samples and reagents to thousands of nanoliter volume chambers where individual assays are performed. Our primary product offerings are summarized in the table below:

Product	Product Description	Applications
Instruments		
BioMark System	Real-time PCR instrument, bundled analysis software and chip loading platforms	Digital PCR, SNP Genotyping, Gene Expression
EP1 System	Real-time PCR instrument, bundled analysis software and chip loading platforms	Digital PCR, SNP Genotyping
Access Array System	Sample preparation system that facilitates parallel amplification of 48 unique samples	Next Generation DNA Sequencing
Consumables		
Dynamic Array Chips	Microfluidic chip based on matrix architecture, allowing users to generate up to 9,216 real-time qPCR reactions simultaneously	Real-time qPCR, SNP Genotyping, Gene Expression
Digital Array Chips	Microfluidic chip based on partitioning architecture, allowing users to divide 48 separate samples into 770 smaller samples	Digital PCR, Gene Expression, Copy Number Variation, Mutation Detection
Access Array Chips	Microfluidic chip that facilitates parallel amplification, barcoding and tagging of 48 unique samples	Next Generation DNA Sequencing
Multi-use Chips	Reusable microfluidic chip that can be used up to five times and is able to produce up to 11,520 genotypes over its lifespan	SNP Genotyping

Strategy

We intend to continue growing as a global leader in providing microfluidic systems to the life science research and Ag-Bio markets. Our business strategy includes the following elements:

- Increase market penetration of our microfluidic systems;
- Increase recurring consumables revenue through instrument sales and product innovation;
- Provide assays and design services that leverage our system strengths in key application areas;
- Provide expanded offerings that complement and support our core technology offerings;
- Leverage our proprietary technology to address new markets;
- Provide superior customer service;
- Enhance chip manufacturing efficiency; and
- Continue to develop our technology and intellectual property position.

Risks Affecting Us

Our business is subject to numerous risks, as more fully described in the section entitled “Risk Factors” immediately following this prospectus summary, including the following:

- We have incurred losses since inception, and we expect to continue to incur substantial losses for the foreseeable future;
- If our products fail to achieve and sustain sufficient market acceptance, our revenue will be adversely affected;
- Our financial results may vary significantly from quarter-to-quarter due to a number of factors, which may lead to volatility in our stock price;
- Our future success is dependent upon our ability to expand our customer base and introduce new applications;
- The life science research and Ag-Bio markets are highly competitive and subject to rapid technological change, and we may not be able to successfully compete;
- We need to expand our resources for marketing, selling and distributing our products and we may not be able to expand our direct sales and marketing force or distribution capabilities to adequately address our customers’ needs;
- Our ability to protect our intellectual property and proprietary technology through patents and other means is uncertain; and
- We may be involved in lawsuits to protect or enforce our patents and proprietary rights and to determine the scope, coverage and validity of others’ proprietary rights.

Corporate History and Information

We were incorporated in California in May 1999 as Mycometrix Corporation, changed our name to Fluidigm Corporation in April 2001 and reincorporated in Delaware in July 2007. Our principal executive offices

are located at 7000 Shoreline Court, Suite 100, South San Francisco, California 94080. Our telephone number is (650) 266-6000. Our website address is www.fluidigm.com. Information contained on our website is not incorporated by reference into this prospectus, and should not be considered to be part of this prospectus.

"Fluidigm," the Fluidigm logo, "BioMark," " Dynamic Array," "Digital Array," "Access Array," "EP1," "FC1," "TOPAZ," "FLUIDLINE," "AutoInspeX," "MSL" and "NanoFlex" are trademarks or registered trademarks of Fluidigm. Other service marks, trademarks and trade names referred to in this prospectus are the property of their respective owners.

THE OFFERING

Common stock offered by us	shares
Common stock to be outstanding after this offering	shares
Use of proceeds	We intend to use the net proceeds from this offering for sales and marketing initiatives, including significantly expanding our sales force, to support the ongoing commercialization of our products; for research and product development activities; for expansion of our facilities and manufacturing operations; and for working capital and other general corporate purposes. We may also use a portion of our net proceeds to acquire and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. See "Use of Proceeds."
Proposed NASDAQ Global Market symbol	FLDM

The number of shares of our common stock to be outstanding following this offering is based on 21,158,887 shares of our common stock outstanding as of September 30, 2010 excludes:

- 3,195,172 shares of common stock issuable upon exercise of options outstanding as of September 30, 2010, at a weighted average exercise price of $2.42 per share;
- 668,845 shares of common stock issuable upon the exercise of warrants outstanding as of September 30, 2010, at a weighted average exercise price of $10.03 per share, after conversion of our convertible preferred stock;
- shares of common stock reserved for future issuance under our stock-based compensation plans, including shares of common stock reserved for issuance under our 2011 Equity Incentive Plan, which will become effective on the date of this prospectus, and any future automatic increase in shares reserved for issuance under such plan; and
- 417 shares of common stock that were issued and outstanding but were not included in stockholders' deficit as of September 30, 2010, pursuant to accounting principles generally accepted in the United States, as these shares were subject to a right of repurchase by us.

Unless otherwise indicated, this prospectus reflects and assumes the following:

- the conversion of all outstanding shares of our convertible preferred stock into an aggregate of 17,812,469 shares of common stock upon the closing of this offering;
- the filing of our amended and restated certificate of incorporation immediately prior to the effectiveness of this offering; and
- no exercise by the underwriters of their over-allotment option.

SUMMARY CONSOLIDATED FINANCIAL DATA

We have derived the summary consolidated statement of operations data for the years ended December 29, 2007, December 27, 2008 and December 31, 2009 from our audited consolidated financial statements included elsewhere in this prospectus. The report of our independent registered public accounting firm on our consolidated financial statements for the year ended December 31, 2009, which appears elsewhere in this prospectus, includes an explanatory paragraph that describes an uncertainty about our ability to continue as a going concern. We have derived the summary consolidated statement of operations data for the nine months ended September 30, 2009 and 2010, and the consolidated balance sheet data as of September 30, 2010 from our unaudited consolidated financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future. The following summary consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus.

	Year Ended			Nine Months Ended	
	December 29, 2007	December 27, 2008	December 31, 2009	September 30, 2009	September 30, 2010
	(in thousands, except per share data)				
Consolidated Statement of Operations Data:					
Revenue:					
Product revenue	$ 4,451	$ 13,364	$ 23,599	$ 16,369	$ 20,883
Collaboration revenue	460	70	—	—	975
Grant revenue	2,364	1,913	1,813	1,420	1,347
Total revenue	7,275	15,347	25,412	17,789	23,205
Costs and expenses:					
Cost of product revenue	3,514	8,364	11,486	8,404	7,999
Research and development	14,389	14,015	12,315	9,249	10,097
Selling, general and administrative	12,898	22,511	19,648	14,386	17,672
Total costs and expenses	30,801	44,890	43,449	32,039	35,768
Loss from operations	(23,526)	(29,543)	(18,037)	(14,250)	(12,563)
Interest expense	(2,790)	(2,031)	(2,876)	(1,849)	(1,620)
Gain (loss) from changes in the fair value of convertible preferred stock warrants, net	(245)	769	(135)	180	210
Interest income	1,140	766	37	33	7
Other income (expense), net	75	393	1,833	189	284
Loss before income taxes	(25,346)	(29,646)	(19,178)	(15,697)	(13,682)
(Provision) benefit for income taxes	(105)	147	50	(3)	(142)
Net loss	$ (25,451)	$ (29,499)	$ (19,128)	$ (15,700)	$ (13,824)
Net loss per share of common stock, basic and diluted(1)	$ (9.21)	$ (10.32)	$ (6.37)	$ (5.34)	$ (4.26)
Shares used in computing net loss per share of common stock, basic and diluted(1)	2,765	2,859	3,004	2,939	3,246
Pro forma net loss per share of common stock, basic and diluted (unaudited) (1)			$ (0.96)		$ (0.67)
Shares used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)(1)			19,710		20,975

(1) Please see Note 2 to our audited consolidated financial statements for an explanation of the method used to calculate basic and diluted net loss per share and basic and diluted pro forma net loss per share of common stock for the year ended December 31, 2009. Please see Note 1 to our interim condensed consolidated financial statements for an explanation of the method used to calculate basic and diluted net loss per share and basic and diluted pro forma net loss per share of common stock for the nine months ended September 30, 2010.

	As of September 30, 2010		
	Actual	Pro Forma(1)	Pro Forma As Adjusted(2)(3)
		(in thousands)	
Consolidated Balance Sheet Data:			
Cash and cash equivalents	$ 5,083	$ 5,083	
Working capital	6,817	7,214	
Total assets	22,090	22,090	
Total long-term debt	14,610	14,610	
Convertible preferred stock warrants	397	—	
Convertible preferred stock	184,549	—	
Total stockholders' deficit	(186,395)	(1,449)	

(1) The pro forma balance sheet data in the table above reflects the conversion of all outstanding shares of convertible preferred stock into common stock and the reclassification of the convertible preferred stock warrant liabilities to additional paid-in capital, each effective upon the closing of this offering.

(2) The pro forma as adjusted balance sheet data in the table above also reflects the pro forma conversions and reclassifications described immediately above plus the sale of shares of our common stock in this offering and the application of the net proceeds at an initial public offering price of $ per share, the midpoint of the range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(3) A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the range set forth on the cover page of this prospectus, would increase (decrease) cash and cash equivalents and each of working capital, total assets and total stockholders' equity by $ million, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. Each increase of 1.0 million shares in the number of shares offered by us would increase cash and cash equivalents and each of working capital, total assets and total stockholders' equity by approximately $ million. Similarly, each decrease of 1.0 million shares in the number of shares offered by us would decrease cash and cash equivalents and each of working capital, total assets and total stockholders' equity by approximately $ million. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with all of the other information in this prospectus, including our consolidated financial statements and related notes, before deciding whether to purchase shares of our common stock. If any of the following risks is realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the price of our common stock could decline and you could lose part or all of your investment.

Risks Related to our Business and Strategy

We have incurred losses since inception, and we expect to continue to incur substantial losses for the foreseeable future.

We have a limited operating history and have incurred significant losses in each fiscal year since our inception, including net losses of $25.5 million, $29.5 million, $19.1 million and $13.8 million during 2007, 2008, 2009 and the nine months ended September 30, 2010, respectively. As of September 30, 2010, we had an accumulated deficit of $196.2 million. These losses have resulted principally from costs incurred in our research and development programs and from our selling, general and administrative expenses. We expect to continue to incur operating and net losses and negative cash flow from operations, which may increase, for the foreseeable future due in part to anticipated increases in expenses for research and product development and significant expansion of our sales and marketing capabilities. Additionally, following this offering, we expect that our selling, general and administrative expenses will increase due to the additional operational and reporting costs associated with being a public company. We anticipate that our business will generate operating losses until we successfully implement our commercial development strategy and generate significant additional revenues to support our level of operating expenses. Because of the numerous risks and uncertainties associated with our commercialization efforts and future product development, we are unable to predict when we will become profitable, and we may never become profitable. Even if we do achieve profitability, we may not be able to sustain or increase our profitability.

If our products fail to achieve and sustain sufficient market acceptance, our revenue will be adversely affected.

Our success depends, in part, on our ability to develop and market products that are recognized and accepted as reliable, enabling and cost effective. Most of our potential customers already use expensive research systems in their laboratories and may be reluctant to replace those systems. Market acceptance of our systems will depend on many factors, including our ability to convince potential customers that our systems are an attractive alternative to existing technologies. Compared to most competing technologies, our microfluidic technology is relatively new, and most potential customers have limited knowledge of, or experience with, our products. Prior to adopting our microfluidic systems, some potential customers may need to devote time and effort to testing and validating our systems. Any failure of our systems to meet these customer benchmarks could result in customers choosing to retain their existing systems or to purchase systems other than ours.

In addition, many customers intend to publish the results of their experiments in scientific and medical journals. Therefore, it is important that our systems be perceived as accurate and reliable by the scientific and medical research community as a whole. Many factors influence the perception of a system including its use by leading research groups and the publication of their results in well regarded journals. Historically, a significant part of our sales and marketing efforts have been directed at convincing industry leaders of the advantages of our systems and encouraging such leaders to publish or present the results of their evaluation of our system. If we are unable to continue to induce leading researchers to use our systems or if such researchers are unable to achieve and publish or present significant experimental results using our systems, acceptance and adoption of our systems will be slowed.

Our financial results may vary significantly from quarter-to-quarter due to a number of factors, which may lead to volatility in our stock price.

Our quarterly revenue and results of operations have varied in the past and may continue to vary significantly from quarter-to-quarter. This variability may lead to volatility in our stock price as research analysts and investors respond to these quarterly fluctuations. These fluctuations are due to numerous factors, including: fluctuations in demand for our products; changes in customer budget cycles and capital spending; seasonal variations in customer operations; tendencies among some customers to defer purchase decisions to the end of the quarter; the large unit value of our systems; changes in our pricing and sales policies or the pricing and sales policies of our competitors; our ability to design, manufacture and deliver products to our customers in a timely and cost-effective manner; quality control or yield problems in our manufacturing operations; our ability to timely obtain adequate quantities of the components used in our products; new product introductions and enhancements by us and our competitors; unanticipated increases in costs or expenses; and fluctuations in foreign currency exchange rates. For example, in 2008 and 2009, we experienced higher sales in the fourth quarter than in the first quarter of the next fiscal year as a result of one or more of the factors described above. The foregoing factors are difficult to forecast, and these, as well as other factors, could materially and adversely affect our quarterly and annual results of operations. In addition, a significant amount of our operating expenses are relatively fixed due to our manufacturing, research and development, and sales and general administrative efforts. Any failure to adjust spending quickly enough to compensate for a revenue shortfall could magnify the adverse impact of such revenue shortfall on our results of operations. Our results of operations may not meet the expectations of research analysts or investors, in which case the price of our common stock could decrease significantly.

Our future success is dependent upon our ability to expand our customer base and introduce new applications.

Our customer base is primarily composed of pharmaceutical, biotechnology and Ag-Bio companies, academic institutions and life science laboratories that perform analyses for research and commercial purposes. Our success will depend in part upon our ability to increase our market share among these customers, attract additional customers outside of these markets and market new applications to existing and new customers as we develop such applications. Attracting new customers and introducing new applications requires substantial time and expense. For example, it may be difficult to identify, engage and market to customers who are unfamiliar with the current applications of our systems. In addition, certain new applications that we are considering developing are not commonly performed with conventional techniques and therefore may require additional sales efforts to create customer awareness of the utility of these applications. Any failure to expand our existing customer base or launch new applications would adversely affect our ability to increase our revenues.

The life science research and Ag-Bio markets are highly competitive and subject to rapid technological change, and we may not be able to successfully compete.

The markets for our products are characterized by rapidly changing technology, evolving industry standards, changes in customer needs, emerging competition, new product introductions and strong price competition. We compete with both established and development stage life science research and Ag-Bio companies that design, manufacture and market instruments for gene expression analysis, genotyping, PCR, other nucleic acid detection and additional applications using well established laboratory techniques, as well as newer technologies such as bead encoded arrays, microfluidics, nanotechnology, high-throughput DNA sequencing and inkjet and photolithographic arrays. Most of our current competitors have significantly greater name recognition, greater financial and human resources, broader product lines and product packages, larger sales forces, larger existing installed bases, larger intellectual property portfolios and greater experience and scale in research and development, manufacturing and marketing than we do. For example, companies such as Affymetrix, Inc., Agilent Technologies, Inc., Caliper Life Sciences, Inc., Illumina, Inc., Life Technologies Corporation, Luminex Corporation, Roche Applied Science, NanoString Technologies, Inc., RainDance Technologies, Inc., Sequenom, Inc. and WaferGen Biosystems, Inc. have products that compete in certain segments of the market in which we sell our products, including gene expression analysis, genotyping and sequencing. In addition, a number of other companies and academic groups are in the process of developing novel technologies for life science markets.

Competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. In light of these advantages, even if our technology is more effective than the product or service offerings of our competitors, current or potential customers might accept competitive products and services in lieu of purchasing our technology. We anticipate that we will face increased competition in the future as existing companies and competitors develop new or improved products and as new companies enter the market with new technologies. We may not be able to compete effectively against these organizations. Increased competition is likely to result in pricing pressures, which could harm our sales, profitability or market share. Our failure to compete effectively could materially and adversely affect our business, financial condition and results of operations.

We have limited experience in marketing, selling and distributing our products, and we need to expand our direct sales and marketing force or distribution capabilities to adequately address our customers' needs.

We have limited experience in marketing, selling and distributing our products. Our BioMark and EP1 systems for genomic analysis were introduced for commercial sale in 2006 and 2008, respectively. Our Access Array system for sample preparation was introduced for commercial sale in 2009. We may not be able to market, sell and distribute our products effectively enough to support our planned growth.

We sell our products primarily through our own sales force and through distributors in certain territories. Our future sales will depend in large part on our ability to develop and substantially expand our direct sales force and to increase the scope of our marketing efforts. Our products are technically complex and used for highly specialized applications. As a result, we believe it is necessary to develop a direct sales force that includes people with specific scientific backgrounds and expertise and a marketing group with technical sophistication. Competition for such employees is intense. We may not be able to attract and retain personnel or be able to build an efficient and effective sales and marketing force, which could negatively impact sales of our products, and reduce our revenues and profitability.

In addition, we may continue to enlist one or more sales representatives and distributors to assist with sales, distribution and customer support globally or in certain regions of the world. If we do seek to enter into such arrangements, we may not be successful in attracting desirable sales representatives and distributors, or we may not be able to enter into such arrangements on favorable terms. If our sales and marketing efforts, or those of any third-party sales representatives and distributors, are not successful, our technologies and products may not gain market acceptance, which would materially impact our business operations.

Our business depends on research and development spending levels of pharmaceutical, Ag-Bio and biotechnology companies and academic, clinical and governmental research institutions and any reduction in such spending could limit our ability to sell our products.

We expect that our revenue in the foreseeable future will be derived primarily from sales of our microfluidic systems and chips to academic institutions and biotechnology, Ag-Bio and pharmaceutical companies and life science laboratories worldwide. Our success will depend upon their demand for and use of our products. Accordingly, the spending policies of these customers could have a significant effect on the demand for our technology. These policies may be based on a wide variety of factors, including the resources available to make purchases, the spending priorities among various types of equipment, policies regarding spending during recessionary periods and changes in the political climate. In addition, academic, governmental and other research institutions that fund research and development activities may be subject to stringent budgetary constraints that could result in spending reductions, reduced allocations or budget cutbacks, which could jeopardize the ability of these customers to purchase our system. Our operating results may fluctuate substantially due to reductions and delays in research and development expenditures by these customers. For example, reductions in capital expenditures by these customers may result in lower than expected system sales and, similarly, reductions in operating expenditures by these customers could result in lower than expected sales of our microfluidic systems and chips. These reductions and delays may result from factors that are not within our control, such as:

- changes in economic conditions;

- changes in government programs that provide funding to research institutions and companies;
- changes in the regulatory environment affecting life science and Ag-Bio companies engaged in research and commercial activities;
- differences in budget cycles across various geographies and industries;
- market-driven pressures on companies to consolidate operations and reduce costs;
- mergers and acquisitions in the life science and Ag-Bio industries; and
- other factors affecting research and development spending.

Any decrease in our customers' budgets or expenditures or in the size, scope or frequency of capital or operating expenditures as a result of the foregoing or other factors could materially and adversely affect our operations or financial condition.

We may not be able to develop new systems or enhance the capabilities of our existing microfluidic systems to keep pace with rapidly changing technology and customer requirements.

Our success depends on our ability to develop new applications for our technology in existing and new markets, while improving the performance and cost effectiveness of our systems. New technologies, techniques or products could emerge that might offer better combinations of price and performance than our current or future product lines and systems. Existing markets for our products, including gene expression analysis, genotyping, digital polymerase chain reaction, or PCR, and single cell analyses, as well as potential markets for our products such as high-throughput DNA sequencing and molecular diagnostics applications, are characterized by rapid technological change and innovation. It is critical to our success for us to anticipate changes in technology and customer requirements and to successfully introduce new, enhanced and competitive technology to meet our customers' and prospective customers' needs on a timely basis. Developing and implementing new technologies will require us to incur substantial development costs and we may not have adequate resources available to be able to successfully introduce new applications of, or enhancements to, our systems. We cannot guarantee that we will be able to maintain technological advantages over emerging technologies in the future. While we have planned improvements to our BioMark, EP1 and Access Array systems, we may not be able to successfully implement these improvements. If we fail to keep pace with emerging technologies, demand for our systems will not grow and may decline, and our business, revenue, financial condition and operating results could suffer materially. Even if we successfully implement some or all of these planned improvements, we cannot guarantee that our current and potential customers will find our enhanced systems to be an attractive alternative to existing technologies, including our current products.

Emerging market opportunities may not develop as quickly as we expect.

The application of our technologies to molecular diagnostics, single cell analysis, digital PCR and sample preparation for next generation DNA sequencing are emerging market opportunities. We believe these opportunities will take several years to develop or mature and we cannot be certain that these market opportunities will develop as we expect. Although we believe that there will be applications of our technologies in these markets, there can be no certainty of the technical or commercial success our technologies will achieve in such markets. Our success in the emerging markets of molecular diagnostics, single cell analysis, digital PCR and sample preparation for next generation DNA sequencing may depend to a large extent on our ability to successfully market and sell products using our technologies. In addition, in the case of molecular diagnostics, we will need to obtain regulatory approval for such products in the United States and in overseas markets.

Our research and product development efforts may not result in commercially viable products within the timeline anticipated, if at all.

Our business is dependent on the improvement of our existing products, our development of new products to serve existing markets and our development of new products to create new markets and applications that were

previously not practical with existing systems. We intend to devote significant personnel and financial resources to research and development activities designed to advance the capabilities of our microfluidic systems technology. Our technology is new and complex and the behavior of fluids and surrounding compounds in a nanoscale environment is difficult to predict in advance. Though we have developed design rules for the implementation of our technology, these are frequently revised to reflect new insights we have gained about the technology. In addition, we have discovered that biological or chemical reactions sometimes behave differently when implemented on our systems rather than in a standard laboratory environment. As a result, research and development efforts may be required to transfer certain reactions to our systems. In the past, product development projects have been significantly delayed when we encountered unanticipated difficulties in implementing a process on our systems. We may have similar delays in the future, and we may not obtain any benefits from our research and development activities. Any delay or failure by us to develop new products or enhance existing products would have a substantial adverse effect on our business and results of operations.

Our sales cycles are lengthy and variable, which makes it difficult for us to forecast revenue and other operating results.

The sales cycles for our systems are lengthy, which makes it difficult for us to accurately forecast revenues in a given period, and may cause revenue and operating results to vary significantly from period to period.

Due in part to the high up-front cost associated with our systems, potential customers for our systems typically need to commit significant time and resources to evaluate our technology and their decision to purchase our instruments may be further limited by budgetary constraints and several layers of internal review and approval, which are beyond our control. In addition, the novelty and complexity of our products often requires us to spend substantial time and effort assisting potential customers in evaluating our instruments, including providing demonstrations and benchmarking our products against other available technologies. Even after initial approval by appropriate decision makers, the negotiation and documentation processes for a purchase can be lengthy. As a result of these factors, our sales cycle has varied widely and, in certain instances has been longer than 12 months. The complexity and variability of our sales cycle has made it difficult for us to accurately project quarterly revenues, and we have frequently failed to meet our internal quarterly projections. Moreover, we do not recognize revenue on sales of our systems until the system has been delivered to the customer and our other revenue recognition criteria have been met. This further complicates our ability to project quarterly revenue as we may have entered into a sale agreement with a customer for a system but cannot predict when that customer will take delivery of the system and when we will be able to recognize the revenue. We expect that our sales will continue to fluctuate on a quarterly basis and that our financial results for some periods may be below those projected by securities analysts. Such fluctuations could have a material adverse effect on our business and on the price of our common stock.

We may rely on strategic partnerships for research and development and commercialization purposes.

We have entered into and may continue to enter into strategic partnerships, including collaborations, joint ventures and alliances with other participants in the life science, Ag-Bio and molecular diagnostics industries. For example, in 2010, we entered into a collaboration agreement in molecular diagnostics and a co-marketing agreement in next generation sequencing. If any of our strategic partners were to change their business strategies or development priorities, or encounter research and development obstacles, they may no longer be willing or able to participate in such strategic partnerships which could have a material adverse effect on our business, financial condition and results of operations. In addition, we may not control the strategic partnerships in which we participate. We may also have certain obligations, including some limited funding obligations or take or pay obligations, with regard to our strategic partnerships, joint ventures and alliances. We may be required to relinquish important rights, including intellectual property rights, and control over the development of our product candidates, assume product or other liabilities associated with the use of our products in diagnostic and other applications, agree to restrictions on the use or applications of our products, or otherwise be subject to terms unfavorable to us.

Under our collaboration agreements with Novartis Vaccines & Diagnostics, Inc., or Novartis V&D, our capabilities in digital PCR are being developed for potential in-vitro diagnostics applications, with an initial focus on the development of an NIPD test for fetal aneuploidies. These agreements provide Novartis V&D with an option to exclusively license our technology in the primary field of non-invasive testing for fetal aneuploidies and the secondary field of non-invasive testing of genetic abnormality, disease or condition in a fetus or in a pregnant woman (other than as tested in the primary field), RhD genotyping or carrier status in a pregnant woman and the genetic carrier status of a prospective mother and her male partner. Under these agreements, except with Novartis V&D, we cannot, directly or in collaboration with a third party, use, develop or sell any products or services in the primary field or the secondary field, other than for research applications in the secondary field. The agreements contain technical feasibility milestones in 2010 and 2011 and may be terminated by Novartis V&D at any time. At Novartis V&D's option, these agreements can be extended to encompass further research, development and commercialization of our products, which could take several years or more to complete. The agreements provide that if a test is commercialized, we would supply the required systems and chips for performance of such test.

Our agreements and efforts with Novartis V&D are in their early stages and are subject to numerous conditions, contingencies, development challenges, milestones, royalty and license fees, indemnification obligations, termination rights, change of control and default provisions and regulatory approvals. There can be no assurance that this collaboration will lead to technology, products or services, that such technology, products or services will receive market acceptance, that we will realize any material revenue or other benefits from this collaboration or that the benefits will exceed our costs.

If our facility becomes inoperable, we will be unable to continue manufacturing our products and as a result, our business will be harmed until we are able to secure a new facility.

We manufacture and assemble all of our products for commercial sale at our facility in Singapore. No other manufacturing or assembly facilities are currently available to us. Our facility and the equipment we use to manufacture our products would be costly to replace and could require substantial lead time to repair or replace. The facility may be harmed or rendered inoperable by natural or man-made disasters, including earthquakes, flooding and power outages, which may render it difficult or impossible for us to perform our research, development and manufacturing for some period of time. The inability to perform our research, development and manufacturing activities, combined with our limited inventory of reserve raw materials and manufactured supplies, may result in the loss of customers or harm our reputation, and we may be unable to reestablish relationships with those customers in the future. Although we possess insurance for damage to our property and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, or at all.

Our future capital needs are uncertain and we may need to raise additional funds in the future.

We believe that the net proceeds from this offering, together with our existing cash and cash equivalents will be sufficient to meet our anticipated cash requirements for at least the next 18 months. However, we may need to raise substantial additional capital to:

- expand the commercialization of our products;
- fund our operations; and
- further our research and development.

Our future funding requirements will depend on many factors, including:

- market acceptance of our products;
- the cost of our research and development activities;

- the cost of filing and prosecuting patent applications;
- the cost of defending, in litigation or otherwise, any claims that we infringe third-party patents or violate other intellectual property rights;
- the cost and timing of regulatory clearances or approvals, if any;
- the cost and timing of establishing additional sales, marketing and distribution capabilities;
- the cost and timing of establishing additional technical support capabilities;
- the effect of competing technological and market developments; and
- the extent to which we acquire or invest in businesses, products and technologies, although we currently have no commitments or agreements relating to any of these types of transactions.

We cannot assure you that we will be able to obtain additional funds on acceptable terms, or at all. If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any debt or additional equity financing that we raise may contain terms that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us. If we are unable to raise adequate funds, we may have to liquidate some or all of our assets, or delay, reduce the scope of or eliminate some or all of our development programs.

If we do not have, or are not able to obtain, sufficient funds, we may have to delay development or commercialization of our products or license to third parties the rights to commercialize products or technologies that we would otherwise seek to commercialize. We also may have to reduce marketing, customer support or other resources devoted to our products or cease operations. Any of these factors could harm our operating results.

To use our products and our BioMark system in particular, customers typically need to purchase specialized reagents. Any interruption in the availability of these reagents for use in our products could limit our ability to market our products.

Our products and our BioMark system in particular, must be used in conjunction with one or more reagents designed to produce or facilitate the particular biological or chemical reaction desired by the user. Many of these reagents are highly specialized and available to the user only from a single supplier or a limited number of suppliers. Our customers typically purchase these reagents directly from the suppliers and we have no control over the supply of those materials. In addition, our products are designed to work with these reagents as they are currently formulated. We have no control of the formulation of these reagents and the performance of our products might be adversely affected if the formulation of these reagents was changed. If one or more of these reagents were to become unavailable or were reformulated, our ability to market and sell our products could be materially and adversely affected.

In addition, the use of a reagent for a particular process may be covered by one or more patents relating to the reagent itself, the use of the reagent for the particular process, the performance of that process or the equipment required to perform the process. Typically, reagent suppliers, who are either the patent holders or their authorized licensees, sell the reagents along with a license or covenant not to sue with respect to such patents. The license accompanying the sale of a reagent often purports to restrict the purposes for which the reagent may be used. If a patent holder or authorized licensee were to assert against us or our customers that the license or covenant relating to a reagent precluded its use with our systems, our ability to sell and market our products could be materially and adversely affected. For example, the current applications of our BioMark system, which represented 52% of our product revenue in 2009, involve real-time polymerase chain reaction, or PCR. Leading suppliers of reagents for PCR reactions include Life Technologies and Roche Applied Science, who are our

direct competitors, and their licensees. These PCR reagents are typically sold pursuant to limited licenses or covenants not to sue with respect to patents held by these companies. We do not have any contractual supply agreements for these PCR reagents, and we cannot assure you that these reagents will continue to be available to our customers for use with our systems, or that these patent holders will not seek to enforce their patents against us, our customers, or suppliers.

If we cannot provide quality technical support, we could lose customers and our operating results could suffer.

The placement of our products at new customer sites, the introduction of our technology into our customers' existing systems and ongoing customer support can be complex. Accordingly, we need highly trained technical support personnel. Hiring technical support personnel is very competitive in our industry due to the limited number of people available with the necessary biochemistry background and ability to understand our systems at a technical level. To effectively support potential new customers and the expanding needs of current customers, we will need to substantially expand our technical support staff. If we are unable to attract, train or retain the number of highly qualified technical services personnel that our business needs, our business and prospects will suffer.

We are dependent on single source suppliers for some of the components and materials used in our systems, and the loss of any of these suppliers could harm our business.

We rely on single source suppliers for certain components and materials used in our systems. Of these single source suppliers, the loss of any of the following would require significant time and effort to locate and qualify an alternative source of supply:

- The chips used in our microfluidic systems are fabricated using a specialized polymer that is available from a limited number of sources. In the past we have encountered quality issues that have reduced our manufacturing yield or required the use of additional manufacturing processes. We do not have a long term contract with our current sole supplier.
- The reader for our BioMark system requires specialized high resolution camera lenses and other components that are available from a limited number of sources.

Our reliance on these suppliers also subjects us to other risks that could harm our business, including the following:

- we may be subject to increased component costs;
- we may not be able to obtain adequate supply in a timely manner or on commercially reasonable terms;
- our suppliers may make errors in manufacturing components that could negatively affect the efficacy of our systems or cause delays in shipment of our systems; and
- our suppliers may encounter financial hardships unrelated to our demand for components, which could inhibit their ability to fulfill our orders and meet our requirements.

We have in the past experienced quality control and supply problems with some of our suppliers, such as manufacturing errors, and may again experience problems in the future. We may not be able to quickly establish additional or replacement suppliers, particularly for our single source components. Any interruption or delay in the supply of components or materials, or our inability to obtain components or materials from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demand of our customers and cause them to cancel orders or switch to competitive products.

We may experience development or manufacturing problems or delays that could limit the growth of our revenue or increase our losses.

We have been manufacturing and assembling our products in significant commercial quantities since 2006, and we may encounter unforeseen situations that would result in delays or shortfalls in our production. In addition, our production processes and assembly methods may have to change to accommodate any significant future expansion of our manufacturing capacity. If we are unable to keep up with demand for our products, our revenue could be impaired, market acceptance for our products could be adversely affected and our customers might instead purchase our competitors' products. Our inability to successfully manufacture our products would have a material adverse effect on our operating results.

All of our commercial products are manufactured at our facility in Singapore. We began commercial production of our chips in Singapore in October 2006 and have transitioned the commercial production of our microfluidic systems to Singapore as well. Production of the elastomeric block that is at the core of our chips is a complex process requiring advanced clean rooms, sophisticated equipment and strict adherence to procedures. Any contamination of the clean room, equipment malfunction or failure to strictly follow procedures can significantly reduce our yield in one or more batches. We have in the past experienced variations in yields due to such factors. Such a drop in yield can increase our cost to manufacture our chips or, in more severe cases, require us to halt the manufacture of our chips until the problem is resolved. Identifying and resolving the cause of a drop in yield can require substantial time and resources.

In addition, developing a chip for a new application may require developing a specific production process for that type of chip. While all of our chips are produced using the same basic processes, significant variations may be required to ensure adequate yield of any particular type of chip. Developing such a process can be very time consuming, and any unexpected difficulty in doing so can delay the introduction of a product.

Our shipments of products to customers are subject to delays or cancellation due to work stoppages or slowdowns, piracy, damage to shipping facilities caused by weather or terrorism, and congestion due to inadequacy of shipping equipment and other causes.

Because all our products are manufactured at our facility in Singapore, we rely on shipping providers to deliver our products to our customers. To the extent that there are disruptions or delays in shipping our products from Singapore or off-loading our products upon arrival at their destination due to labor disputes, tariff or World Trade Organization-related disputes, piracy, physical damage to shipping facilities or equipment caused by severe weather or terrorist incidents, congestion at shipping facilities, inadequate equipment to load, dock and offload our products or energy-related tie-ups or otherwise, or for other reasons, product shipments to our customers will be delayed. Depending on the severity of such consequences, this may have an adverse effect on our financial condition and results of operations.

If we are unable to recruit and retain key executives and scientists, we may be unable to achieve our goals.

Our performance is substantially dependent on the performance of our senior management and key scientific and technical personnel, particularly Gajus V. Worthington, our President and Chief Executive Officer. We do not maintain fixed term employment contracts with any of our employees. The loss of the services of any member of our senior management or our scientific or technical staff might significantly delay or prevent the development of our products or achievement of other business objectives by diverting management's attention to transition matters and identification of suitable replacements, if any, and could have a material adverse effect on our business. We do not maintain significant key man life insurance on any of our employees.

In addition, our research and product development efforts could be delayed or curtailed if we are unable to attract, train and retain highly skilled employees, particularly, senior scientists and engineers. To expand our research and product development efforts, we need additional people skilled in areas such as molecular and cellular biology, assay development and manufacturing. Competition for these people is intense. Because of the

complex and technical nature of our system and the dynamic market in which we compete, any failure to attract and retain a sufficient number of qualified employees could materially harm our ability to develop and commercialize our technology.

Adverse conditions in the global economy and disruption of financial markets may significantly harm our revenue, profitability and results of operations.

The global economy has been experiencing a significant economic downturn, and global credit and capital markets have experienced substantial volatility and disruption. Volatility and disruption of financial markets could limit our customers' ability to obtain adequate financing or credit to purchase and pay for our products in a timely manner or to maintain operations, which could result in a decrease in sales volume that could harm our results of operations. General concerns about the fundamental soundness of domestic and international economies may also cause our customers to reduce their purchases. Changes in governmental banking, monetary and fiscal policies to address liquidity and increase credit availability may not be effective. Significant government investment and allocation of resources to assist the economic recovery of sectors which do not include our customers may reduce the resources available for government grants and related funding for life science, Ag-Bio and molecular diagnostics research and development. Continuation or further deterioration of these financial and macroeconomic conditions could significantly harm our sales, profitability and results of operations.

We may be unable to manage our anticipated growth effectively.

The rapid growth of our business has placed a significant strain on our managerial, operational and financial resources and systems. We have increased the number of our employees from 131 at December 29, 2007 to 198 at September 30, 2010. To execute our anticipated growth successfully, we must continue to attract and retain qualified personnel and manage and train them effectively. We must also upgrade our internal business processes and capabilities to create the scalability that a growing business demands.

We believe our commercial manufacturing facility located in Singapore is sufficient to meet our short-term manufacturing needs. The current leases for our manufacturing facility in Singapore expire at various times from October 2011 through July 2013. In order to meet the long-term demand for our microfluidic systems, we believe that we will need to add to our existing manufacturing space in Singapore or move all of our manufacturing facilities to a new location in Singapore in 2012. Such a move will involve significant expense in connection with the establishment of new clean rooms, the movement and installation of key manufacturing equipment and modifications to our manufacturing process and we cannot assure you that such a move would not delay or otherwise adversely affect our manufacturing activities.

Further, our anticipated growth will place additional strain on our suppliers and manufacturing facilities, resulting in an increased need for us to carefully monitor quality assurance. Any failure by us to manage our growth effectively could have an adverse effect on our ability to achieve our development and commercialization goals.

Demand for our technology could be reduced by legal, social and ethical concerns surrounding the use of genetic information and biological materials.

Our products may be used to provide genetic information or analyze biological materials from humans, agricultural crops and other living organisms. The information obtained from our products could be used in a variety of applications, which may have underlying legal, social and ethical concerns, including the genetic engineering or modification of agricultural products, testing for genetic predisposition for certain medical conditions and stem cell research. Governmental authorities could, for safety, social or other purposes, call for limits on or impose regulations on the use of genetic testing or the use of certain biological materials. Such concerns or governmental restrictions could limit the use of our products, which could have a material adverse effect on our business, financial condition and results of operations.

Our products, although not currently subject to regulation by the U.S. Food and Drug Administration or other regulatory agencies as medical devices, could become subject to regulation in the future.

Our products are currently labeled and sold to biotechnology and pharmaceutical companies, academic institutions, and life sciences laboratories for research purposes only, and not diagnostic procedures. As a research only products, they and are not subject to regulation as medical devices by the U.S. Food and Drug Administration, or FDA, or comparable agencies of other countries. However, if we change the labeling of our products in the future to include diagnostic applications, our products or related applications could be subject to the FDA's pre- and post-market regulations. For example, if we wish to label and market our products for use in performing clinical diagnostics, we would first need to obtain FDA premarket clearance or approval. Obtaining FDA clearance or approval can be expensive and uncertain, generally takes several months to years to obtain, and may require detailed and comprehensive scientific and clinical data. Notwithstanding the expense, these efforts may never result in FDA approval or clearance. Even if we were to obtain regulatory approval or clearance, it may not be for the uses we believe are important or commercially attractive.

Further, FDA may expand its jurisdiction over our products or the products of our customers, which could impose restrictions on our ability to market and sell our products. For example, our customers may use our research use only products in their own laboratory developed tests, or LDTs, for clinical diagnostic use. FDA has historically exercised enforcement discretion in not enforcing the medical device regulations against LDTs. However, the FDA could assert jurisdiction over some or all LDTs, which may impact our customers' uses of our products. A significant change in the way that the FDA regulates our products or the LDTs that our customers develop may require us to change our business model in order to maintain compliance with these laws. The FDA recently held a meeting in July 2010, during which it indicated that it intends to reconsider its policy of enforcement discretion and to begin drafting a new oversight framework for LDTs. If the FDA imposes significant changes to the regulation of LDTs, or modifies its approach to our research use only tests which may be used by our customers for clinical use, it could reduce our revenues or increase our costs and adversely affect our business, prospects, results of operations or financial condition.

Finally, we may be required to proactively achieve compliance with certain FDA regulations as part of our contracts with customers or as part of our collaborations with third parties. In addition, we may voluntarily seek to conform our manufacturing operations to the FDA's good manufacturing practice regulations for medical devices, known as the Quality System Regulation, or QSR. The QSR is a complex regulatory scheme that governs the methods and documentation covering the design, testing, control, manufacturing, labeling, quality assurance, packaging, storage and shipping of medical device products. The FDA enforces the QSR through periodic unannounced inspections of registered manufacturing facilities. The failure to take satisfactory corrective action in response to an adverse QSR inspection could result in enforcement actions, including a public warning letter, a shutdown of manufacturing operations, a product recall, civil or criminal penalties or other sanctions, which could in turn cause our sales and business to suffer.

Our products could have unknown defects or errors, which may give rise to claims against us and adversely affect market adoption of our systems.

Our microfluidic systems utilize novel and complex technology applied on a nanoliter scale and such systems may develop or contain undetected defects or errors. We cannot assure you that material performance problems, defects or errors will not arise, and as we increase the density and integration of our microfluidic systems, these risks may increase. While we do not provide express warranties that our microfluidic systems will meet performance expectations or be free from defects, we have done so in the past, and expect to in the future in response to customer concerns in order to preserve customer relationships and help foster continued adoption and use of our systems. We typically do provide warranties relating to other parts of our microfluidic systems. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins.

In manufacturing our products, we depend upon third parties for the supply of various components. Many of these components require a significant degree of technical expertise to produce. If our suppliers fail to produce components to specification, or if the suppliers, or we, use defective materials or workmanship in the manufacturing process, the reliability and performance of our products will be compromised.

If our products contain defects, we may experience:

- a failure to achieve market acceptance or expansion of our product sales;
- loss of customer orders and delay in order fulfillment;
- damage to our brand reputation;
- increased cost of our warranty program due to product repair or replacement;
- product recalls or replacements;
- inability to attract new customers;
- diversion of resources from our manufacturing and research and development departments into our service department; and
- legal claims against us, including product liability claims, which could be costly and time consuming to defend and result in substantial damages.

The occurrence of any one or more of the foregoing could negatively affect our business, financial condition and results of operations.

We generate a substantial portion of our revenues internationally and are subject to various risks relating to such international activities which could adversely affect our international sales and operating performance.

During 2007, 2008, 2009 and the nine months ended September 30, 2010, approximately 45%, 48%, 46% and 42%, respectively, of our product revenue was generated from sales to customers located outside of the United States. We believe that a significant percentage of our future revenue will come from international sources as we expand our overseas operations and develop opportunities in additional international areas. In addition, all of our commercial products are manufactured in Singapore. Our international business may be adversely affected by changing economic, political and regulatory conditions in foreign countries. Because the majority of our product sales are currently denominated in U.S. dollars, if the value of the U.S. dollar increases relative to foreign currencies, our products could become more costly to the international consumer and therefore less competitive in international markets, which could affect our financial performance. In addition, if the value of the U.S. dollar decreases relative to the Singapore dollar, it would become more costly in U.S. dollars for us to manufacture our products in Singapore. Furthermore, fluctuations in exchange rates could reduce our revenue, particularly with respect to grant revenue under agreements in Singapore, and affect demand for our products. Engaging in international business inherently involves a number of other difficulties and risks, including:

- required compliance with existing and changing foreign regulatory requirements and laws;
- export or import restrictions;
- laws and business practices favoring local companies;
- longer payment cycles and difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;
- political and economic instability;
- potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements and other trade barriers;

- difficulties and costs of staffing and managing foreign operations; and
- difficulties protecting or procuring intellectual property rights.

If one or more of these risks occurs, it could require us to dedicate significant resources to remedy, and if we are unsuccessful in finding a solution, our financial results will suffer.

We use hazardous chemicals and biological materials in our business. Any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.

Our research and development and manufacturing processes involve the controlled use of hazardous materials, including flammables, toxics, corrosives and biologics. Our operations produce hazardous biological and chemical waste products. We cannot eliminate the risk of accidental contamination or discharge and any resultant injury from these materials. In addition, our microfluidic systems involve the use of pressurized systems and may involve the use of hazardous materials, which could result in injury. We may be sued for any injury or contamination that results from our use or the use by third parties of these materials. We do not currently maintain separate environmental liability coverage and any such contamination or discharge could result in significant cost to us in penalties, damages and suspension of our operations.

We will incur significant increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

We have never operated as a public company. As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act, as well as new rules subsequently implemented by the Securities and Exchange Commission and the NASDAQ Global Market, have imposed various new requirements on public companies, including requiring changes in corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these new compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect these new rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain the same or similar coverage.

If we fail to maintain effective internal control over financial reporting in the future, the accuracy and timing of our financial reporting may be impaired, which could adversely affect our business and our stock price.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. In particular, with respect to our 2011 fiscal year, we must perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our testing, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses. Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management time on compliance-related issues. We currently do not have an internal audit group and we will evaluate the need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by the NASDAQ Global Market, the Securities and Exchange Commission or other regulatory authorities, which would require additional financial and management resources.

Some of our programs are partially supported by government grants, which may be reduced, withdrawn, delayed or reclaimed.

We have received and may continue to receive funds under research and economic development programs funded by the governments of Singapore and the United States. Funding by these governments may be significantly reduced or eliminated in the future for a number of reasons. For example, some U.S. programs are subject to a yearly appropriations process in Congress. Similarly, our grants from the Singapore government are part of an official policy to develop a life science industry in Singapore; that policy could change or the role of grants in it could be reduced or eliminated at any time. Grant agreements currently in place with the Singaporean government are set to expire in May 2011. In addition, we may not receive funds under existing or future grants because of budgeting constraints of the agency administering the program. A restriction on the government funding available to us would reduce the resources that we would be able to devote to existing and future research and development efforts. Such a reduction could delay the introduction of new products and hurt our competitive position.

Our agreements with the Singapore Economic Development Board, or EDB, provide that our continued eligibility for incentive grant payments from EDB is subject to our satisfaction of agreed upon targets for increasing levels of research, development and manufacturing activity in Singapore, including the use of local service providers, the hiring of personnel in Singapore, the incurrence of eligible expenses in Singapore, our receipt of new equity investment and our achievement of certain milestones relating to new product development or completion of specific manufacturing process objectives. These agreements further provide EDB with the right to demand repayment of a portion of past grants in the event that we did not meet our obligations under the applicable agreements. Based on correspondence with EDB, we believe that we have satisfied the conditions applicable to our EDB grant revenue through September 30, 2010.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

In general, under Section 382 of the Internal Revenue Code, a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-change net operating losses or NOLs to offset future taxable income. Our existing NOLs may be subject to limitations arising from previous ownership changes, and if we undergo an ownership change in connection with or after this offering, our ability to utilize NOLs could be further limited by Section 382 of the Internal Revenue Code. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the Internal Revenue Code. We may not be able to utilize a material portion of the NOLs reflected on our balance sheet and for this reason, we have fully reserved against the value of our NOLs on our balance sheet.

Our independent registered public accounting firm has expressed doubt about our ability to continue as a going concern.

Based on our cash balances as of December 31, 2009 and our projected spending in 2010 and without giving effect to our receipt of the proceeds of this offering, our independent registered public accounting firm has included in their audit opinion for the year ended December 31, 2009 a statement with respect to our ability to continue as a going concern. If we became unable to continue as a going concern, we may have to liquidate our assets and the values we receive for our assets in liquidation or dissolution could be significantly lower than the values reflected in our financial statements.

Risks Related to Intellectual Property

Our ability to protect our intellectual property and proprietary technology through patents and other means is uncertain.

Our commercial success depends in part on our ability to protect our intellectual property and proprietary technologies. We rely on patent protection, where appropriate and available, as well as a combination of copyright, trade secret and trademark laws, and nondisclosure, confidentiality and other contractual restrictions to protect our proprietary technology. However, these legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. Our pending U.S. and foreign patent applications may not issue as patents or may not issue in a form that will be sufficient to protect our proprietary technology and gain or keep our competitive advantage. Any patents we have obtained or do obtain may be subject to re-examination, reissue, opposition or other administrative proceeding, or may be challenged in litigation, and such challenges could result in a determination that the patent is invalid or unenforceable. In addition, competitors may be able to design alternative methods or devices that avoid infringement of our patents. To the extent our intellectual property, including licensed intellectual property, offers inadequate protection, or is found to be invalid or unenforceable, we are exposed to a greater risk of direct competition. If our intellectual property does not provide adequate protection against our competitors' products, our competitive position could be adversely affected, as could our business. Both the patent application process and the process of managing patent disputes can be time consuming and expensive. Furthermore, the laws of some foreign countries may not protect our intellectual property rights to the same extent as do the laws of the United States.

The patent positions of companies in the life science and Ag-Bio industries can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in such companies' patents has emerged to date in the United States. The laws of some non-U.S. countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement of our patents. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business. Changes in either the patent laws or in interpretations of patent laws in the United States or other countries may diminish the value of our intellectual property. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. For example:

- We might not have been the first to make the inventions covered by each of our pending patent applications;
- We might not have been the first to file patent applications for these inventions;
- Others may independently develop similar or alternative products and technologies or duplicate any of our products and technologies;
- It is possible that none of our pending patent applications will result in issued patents, and even if they issue as patents, they may not provide a basis for commercially viable products, or may not provide us with any competitive advantages, or may be challenged and invalidated by third parties;
- We may not develop additional proprietary products and technologies that are patentable;
- The patents of others may have an adverse effect on our business; and
- We apply for patents covering our products and technologies and uses thereof, as we deem appropriate. However, we may fail to apply for patents on important products and technologies in a timely fashion or at all.

In addition to pursuing patents on our technology, we take steps to protect our intellectual property and proprietary technology by entering into confidentiality agreements and intellectual property assignment agreements with our employees, consultants, corporate partners and, when needed, our advisors. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure. Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, it would be expensive and time consuming, and the outcome would be unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets.

We may be involved in lawsuits to protect or enforce our patents and proprietary rights, to determine the scope, coverage and validity of others' proprietary rights, or to defend against third party claims of intellectual property infringement that could require us to spend significant time and money and could prevent us from selling our products or services or impact our stock price.

Litigation may be necessary for us to enforce our patent and proprietary rights and/or to determine the scope, coverage and validity of others' proprietary rights. Litigation on these matters has been prevalent in our industry and we expect that this will continue. To determine the priority of inventions, we may have to initiate and participate in interference proceedings declared by the U.S. Patent and Trademark Office that could result in substantial legal fees and could substantially affect the scope of our patent protection. Also, our intellectual property may be subject to significant administrative and litigation proceedings such as invalidity, unenforceability, re-examination and opposition proceedings against our patents. The outcome of any litigation or other proceeding is inherently uncertain and might not be favorable to us, and we might not be able to obtain licenses to technology that we require. Even if such licenses are obtainable, they may not be available at a reasonable cost. We could therefore incur substantial costs related to royalty payments for licenses obtained from third parties, which could negatively affect our gross margins. Further, we could encounter delays in product introductions, or interruptions in product sales, as we develop alternative methods or products.

In addition, if we resort to legal proceedings to enforce our intellectual property rights or to determine the validity, scope and coverage of the intellectual property or other proprietary rights of others, the proceedings could be burdensome and expensive, even if we were to prevail.

Our commercial success may depend in part on our non-infringement of the patents or proprietary rights of third parties. Numerous significant intellectual property issues have been litigated, and will likely continue to be litigated, between existing and new participants in the PCR market and competitors may assert that our products infringe their intellectual property rights as part of a business strategy to impede our successful entry into those markets. Third parties may assert that we are employing their proprietary technology without authorization. For example, on June 4, 2008 we received a letter from Applied Biosystems, Inc., now Life Technologies Corporation, asserting that our BioMark system for gene expression analysis infringes upon U.S. Patent No. 6,814,934, or the '934 patent, and its foreign counterparts in Europe and Canada. The '934 patent is owned by Applied Biosystems, LLC. In response to this letter, we filed suit against Applied Biosystems and Applera in federal district court in the Southern District of New York seeking declaratory judgment of non-infringement and invalidity of the '934 patent. Applied Biosystems and Applera answered our complaint and asserted a counterclaim against us, alleging infringement of the '934 patent. Pursuant to a joint stipulation, the claims and counterclaims were dismissed on January 13, 2009, without prejudice to the parties' claims, which can be reasserted.

In addition, our competitors and others may have patents or may in the future obtain patents and claim that use of our products infringes these patents. As we move into new markets and applications for our products, incumbent participants in such markets may assert their patents and other proprietary rights against us as a means of slowing our entry into such markets or as a means to extract substantial license and royalty payments from us.

Patent infringement suits can be expensive, lengthy and disruptive to business operations. We could incur substantial costs and divert the attention of our management and technical personnel in prosecuting or defending against any claims, and may harm our reputation. There can be no assurance that we will prevail in any suit initiated against us by third parties. Furthermore, parties making claims against us may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize and sell products, and could result in the award of substantial damages against us, including treble damages and attorneys' fees and costs in the event that we are found to be a willful infringer of third party patents.

In the event of a successful claim of infringement against us, we may be required to obtain one or more licenses from third parties, which we may not be able to obtain at a reasonable cost, if at all. In addition, we could encounter delays in product introductions while we attempt to develop alternative methods or products to avoid infringing third-party patents or proprietary rights. Defense of any lawsuit or failure to obtain any required licenses on favorable terms could prevent us from commercializing our products, and the risk of a prohibition on the sale of any of our products could adversely affect our ability to grow and gain market acceptance for our products.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

In addition, our agreements with some of our suppliers, distributors, customers and other entities with whom we do business may require us to defend or indemnify these parties to the extent they become involved in infringement claims against us, including the claims described above. We could also voluntarily agree to defend or indemnify third parties in instances where we are not obligated to do so if we determine it would be important to our business relationships. If we are required or agree to defend or indemnify any of these third parties in connection with any infringement claims, we could incur significant costs and expenses that could adversely affect our business, operating results, or financial condition.

We engage in discussions regarding possible commercial, licensing and cross-licensing agreements with third parties from time to time. For example, we have engaged in such discussions with Caliper Life Sciences regarding its microfluidic patent portfolio and we have engaged in such discussions with Life Technologies regarding the '934 patent and other patents owned by the parties, including patents in the field of digital PCR. There can be no assurance that these discussions will lead to the execution of commercial license or cross-license agreements or that such agreements will be on terms that are favorable to us. In addition, if we enter into cross-licensing agreements, there is no assurance that we will be able to effectively compete against others who are licensed under our patents.

We depend on certain technologies that are licensed to us. We do not control these technologies and any loss of our rights to them could prevent us from selling our products.

We rely on licenses in order to be able to use various proprietary technologies that are material to our business, including our core integrated fluidic circuit and multi-layer soft lithography technologies. We do not own the patents that underlie these licenses. Our rights to use the technology we license are subject to the negotiation of, continuation of and compliance with the terms of those licenses. In some cases, we do not control the prosecution, maintenance, or filing of the patents to which we hold licenses, or the enforcement of these patents against third parties. Some of our patents and patent applications were either acquired from another company who acquired those patents and patent applications from yet another company, or are licensed from a third party. Thus, these patents and patent applications are not written by us or our attorneys, and we did not have control over the drafting and prosecution. The former patent owners and our licensors might not have given the

same attention to the drafting and prosecution of these patents and applications as we would have if we had been the owners of the patents and applications and had control over the drafting and prosecution. We cannot be certain that drafting and/or prosecution of the licensed patents and patent applications by the licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights.

Our rights to use the technology we license is subject to the validity of the owner's intellectual property rights. Enforcement of our licensed patents or defense or any claims asserting the invalidity of these patents is often subject to the control or cooperation of our licensors. Legal action could be initiated against the owners of the intellectual property that we license. Even if we are not a party to these legal actions, an adverse outcome could harm our business because it might prevent these other companies or institutions from continuing to license intellectual property that we may need to operate our business.

Certain of our licenses contain provisions that allow the licensor to terminate the license upon specific conditions. Our rights under the licenses are subject to our continued compliance with the terms of the license, including the payment of royalties due under the license. Termination of these licenses could prevent us from marketing some or all of our products. Because of the complexity of our products and the patents we have licensed, determining the scope of the license and related royalty obligation can be difficult and can lead to disputes between us and the licensor. An unfavorable resolution of such a dispute could lead to an increase in the royalties payable pursuant to the license. If a licensor believed we were not paying the royalties due under the license or were otherwise not in compliance with the terms of the license, the licensor might attempt to revoke the license. If such an attempt were successful, we might be barred from producing and selling some or all of our products.

We are subject to certain manufacturing restrictions related to licensed technologies that were developed with the financial assistance of U.S. governmental grants.

We are subject to certain U.S. government regulations because we have licensed technologies that were developed with U.S. government grants. In accordance with these regulations, these licenses provide that products embodying the technologies will be manufactured substantially in the United States. If this domestic manufacturing requirement is not met, the government agency that funded the relevant grant is entitled to exercise specified rights, referred to as "march-in rights", which if exercised would allow the government agency to require the licensors or us to grant a non-exclusive, partially exclusive or exclusive license in any field of use to a third party designated by such agency. All of our microfluidic systems revenue is dependent upon the availability of our chips, which incorporate technology developed with U.S. government grants. As of December 2010, all of our commercial products, including microfluidic systems and chips are manufactured at our facility in Singapore. The federal regulations allow the funding government agency to grant, at the request of the licensors of such technology, a waiver of the domestic manufacturing requirement. Waivers may be requested prior to any government notification. We have assisted the licensor of these technologies with the analysis of the domestic manufacturing requirement, and, in December 2008, the licensor applied for a waiver of the domestic manufacturing requirement with respect to certain patents. In July 2009, the funding government agency granted the requested waiver of the domestic manufacturing requirement for a three year period commencing in July 2009. If in the future it were to be determined that we are in violation of the domestic manufacturing requirement and additional waivers of such requirement was either not requested or not granted, then the U.S. government could exercise its march-in rights. In addition, these licenses contain provisions relating to compliance with this domestic manufacturing requirement. If it were determined that we are not in compliance with these provisions and such non-compliance constituted a material breach of the licenses, the licenses could be terminated. Either the exercise of march-in rights or the termination of one or more of our licenses could materially adversely affect our business, operations and financial condition.

We may be subject to damages resulting from claims that we or our employees have wrongfully used or disclosed alleged trade secrets of our employees' former employers.

Many of our employees were previously employed at universities or other life science or Ag-Bio companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. A loss of key research personnel or their work product could hamper or prevent our ability to commercialize certain potential products, which could severely harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

Risks Related to Our Common Stock and this Offering

We expect that our stock price will fluctuate significantly, and you may not be able to resell your shares at or above the initial public offering price.

Prior to this offering, there has been no public market for shares of our common stock. We cannot predict the extent to which investor interest in our company will lead to the development of an active trading market on the NASDAQ Global Market or otherwise or how liquid that market might become. If an active trading market does not develop, you may have difficulty selling any of our shares of common stock that you buy. We and the underwriters will determine the initial public offering price of our common stock through negotiation. This price will not necessarily reflect the price at which investors in the market will be willing to buy and sell our shares following this offering. In addition, the trading price of our common stock following this offering may be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. These factors include:

- actual or anticipated quarterly variation in our results of operations or the results of our competitors;
- announcements by us or our competitors of new commercial products, significant contracts, commercial relationships or capital commitments;
- issuance of new or changed securities analysts' reports or recommendations for our stock;
- developments or disputes concerning our intellectual property or other proprietary rights;
- commencement of, or our involvement in, litigation;
- market conditions in the life science, Ag-Bio and molecular diagnostics sectors;
- failure to complete significant sales;
- manufacturing disruptions that could occur if we were unable to successfully expand our production in our current or an alternative facility;
- any future sales of our common stock or other securities;
- any major change to the composition of our Board or management; and
- general economic conditions and slow or negative growth of our markets.

The stock market in general, and market prices for the securities of technology-based companies like ours in particular, have from time to time experienced volatility that often has been unrelated to the operating performance of the underlying companies. A certain degree of stock price volatility can be attributed to being a newly public company. These broad market and industry fluctuations may adversely affect the market price of our common stock, regardless of our operating performance. In several recent situations where the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the

company that issued the stock. If any of our stockholders were to bring a lawsuit against us, the defense and disposition of the lawsuit could be costly and divert the time and attention of our management and harm our operating results.

If securities or industry analysts do not publish research or publish unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will rely in part on the research and reports that equity research analysts publish about us and our business. We do not currently have and may never obtain research coverage by equity research analysts. Equity research analysts may elect not to provide research coverage of our common stock after the completion of this offering, and such lack of research coverage may adversely affect the market price of our common stock. In the event we obtain equity research analyst coverage, we will not have any control of the analysts or the content and opinions included in their reports. The price of our stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline.

Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment.

The initial public offering price of our common stock is substantially higher than the net tangible book value per share of our common stock immediately prior to this offering. Therefore, if you purchase our common stock in this offering, you will incur an immediate dilution of $ in net tangible book value per share as of September 30, 2010 from the price you paid, based on an assumed initial public offering price of $ per share, the mid-point of the range set forth on the cover page of this prospectus. In addition, new investors who purchase shares in this offering will contribute approximately % of the total amount of equity capital raised by us through the date of this offering, but will only own approximately % of the outstanding share capital and approximately % of the voting rights. In addition, we have issued options and warrants to acquire common stock at prices below the initial public offering price. To the extent outstanding options and warrants are ultimately exercised, there will be further dilution to investors who purchase shares in this offering. In addition, if the underwriters exercise their over-allotment option or if we issue additional equity securities, investors purchasing shares in this offering will experience additional dilution. For a further description of the dilution that you will experience immediately after this offering, see “Dilution.”

Future sales of shares by existing stockholders could cause our stock price to decline.

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market after the lock-up and other legal restrictions on resale discussed in this prospectus lapse, the trading price of our common stock could decline. Based on shares outstanding as of September 30, 2010, upon completion of this offering, we will have outstanding a total of shares of common stock, assuming no exercise of the underwriters’ over-allotment option. Of these shares, only the shares of common stock sold in this offering by us will be freely tradable, without restriction, in the public market immediately after the offering. Each of our directors and officers, and certain of our stockholders, have entered into lock-up agreements with the underwriters that restrict their ability to sell or transfer their shares. The lock-up agreements pertaining to this offering will expire 180 days from the date of this prospectus, although they may be extended for up to an additional 34 days under certain circumstances. Our underwriters, however, may, in their sole discretion, permit our officers, directors and other current stockholders who are subject to the contractual lock-up to sell shares prior to the expiration of the lock-up agreements. After the lock-up agreements expire, based on shares outstanding as of September 30, 2010, up to an additional shares of common stock will be eligible for sale in the public market, of which are held by directors and executive officers and will be subject to volume limitations under Rule 144 under the Securities Act and various vesting agreements. In addition, shares of common stock that are subject to outstanding options as of September 30, 2010 will become eligible for

sale in the public market to the extent permitted by the provisions of various vesting agreements, the lock-up agreements and Rules 144 and 701 under the Securities Act. If these additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

Our directors and executive officers will continue to have substantial control over us after this offering and could limit your ability to influence the outcome of key transactions, including changes of control.

Following the completion of this offering, our executive officers, directors and their affiliates will beneficially own or control approximately % of the outstanding shares of our common stock, assuming no exercise of the underwriters' over-allotment option. Accordingly, these executive officers, directors and their affiliates, acting as a group, will have substantial influence over the outcome of corporate actions requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets or any other significant corporate transactions. These stockholders may also delay or prevent a change of control of us, even if such a change of control would benefit our other stockholders. The significant concentration of stock ownership may adversely affect the trading price of our common stock due to investors' perception that conflicts of interest may exist or arise. For information regarding the ownership of our outstanding stock by our executive officers and directors and their affiliates, see "Principal Stockholders."

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

Provisions in our certificate of incorporation and bylaws, as amended and restated upon the closing of this offering, may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws to become effective upon completion of this offering include provisions that:

- authorize our board of directors to issue, without further action by the stockholders, up to 20,000,000 shares of undesignated preferred stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our board of directors, the Chairman of the board, the Chief Executive Officer or the President;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;
- establish that our board of directors is divided into three classes, Class I, Class II and Class III, with each class serving staggered three year terms;
- provide that our directors may be removed only for cause;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- specify that no stockholder is permitted to cumulate votes at any election of directors; and
- require a super-majority of votes to amend certain of the above-mentioned provisions.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. We intend to use the net proceeds from this offering for sales and marketing initiatives, including significantly expanding our sales force, to support the ongoing commercialization of our products; for research and product development activities; for expansion of our facilities and manufacturing operations; and for working capital and other general corporate purposes. We may also use a portion of our net proceeds to acquire and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. We have not allocated these net proceeds for any specific purposes. We might not be able to yield a significant return, if any, on any investment of these net proceeds. You will not have the opportunity to influence our management's decisions on how to use the net proceeds from this offering, and our failure to apply these funds effectively could have a material adverse effect on our business, delay the development of our product candidates and cause the price of our common stock to decline.

We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have paid no cash dividends on any of our classes of capital stock to date, have contractual restrictions against paying cash dividends and currently intend to retain our future earnings to fund the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus includes forward-looking statements that relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Words such as, but not limited to, “believe,” “expect,” “anticipate,” “estimate,” “intend,” “plan,” “targets,” “likely,” “will,” “would,” “could,” and similar expressions or phrases, or the negative of those expressions or phrases identify forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on our projections of the future that are subject to known and unknown risks and uncertainties and other factors that may cause our actual results, level of activity, performance or achievements expressed or implied by these forward-looking statements, to differ. The sections in this prospectus entitled “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” as well as other sections in this prospectus, discuss some of the factors that could contribute to these differences.

Other unknown or unpredictable factors also could harm our results. Consequently, actual results or developments anticipated by us may not be realized or, even if substantially realized, may not have the expected consequences to, or effects on, us. Given these uncertainties, prospective investors are cautioned not to place undue reliance on such forward-looking statements. Except as required by law, we undertake no obligation to update or revise publicly any of the forward-looking statements after the date of this prospectus.

This prospectus contains market data that we obtained from industry sources. These sources do not guarantee the accuracy or completeness of the information. Although we believe that the industry sources are reliable, we have not independently verified the information. The market data include projections that are based on a number of other projections. While we believe these assumptions to be reasonable and sound as of the date of this prospectus, actual results may differ from the projections.

USE OF PROCEEDS

We estimate that the net proceeds from the sale of shares of our common stock that we are selling in this offering will be $ million, based on an assumed initial public offering price of $ per share, the midpoint of the range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. A $1.00 increase (decrease) in the assumed initial public offering price would increase (decrease) the net proceeds to us by $ million, after deducting estimated underwriting discounts and commissions and estimated offering expenses, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. An increase of 1.0 million shares in the number of shares offered by us would increase the net proceeds to us by $ million. Similarly, a decrease of 1.0 million shares in the number of shares offered by us would decrease the net proceeds to us by $ million. If the underwriters' over-allotment option is exercised in full, we estimate that we will receive net proceeds of $ million.

Of the net proceeds that we will receive from this offering, we expect to use approximately:

- $ million for sales and marketing initiatives, including significantly expanding our sales force, to support the ongoing commercialization of our products;
- $ million for research and product development activities;
- $ million for expansion of our facilities and manufacturing operations; and
- the balance for working capital and other general corporate purposes.

We may also use a portion of our net proceeds to acquire and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction and are not involved in negotiations to do so. Pending these uses, we intend to invest our net proceeds from this offering primarily in investment-grade, interest-bearing instruments.

As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering. The amount and timing of our expenditures will depend on several factors, including cash flows from our operations and the anticipated growth of our business. Accordingly, our management will have broad discretion in the application of the net proceeds and investors will be relying on the judgment of our management regarding the application of the proceeds from this offering. We reserve the right to change the use of these proceeds as a result of certain contingencies such as the results of our commercialization efforts, competitive developments, opportunities to acquire products, technologies or businesses and other factors.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all future earnings for the operation and expansion of our business and, therefore, we do not anticipate declaring or paying cash dividends in the foreseeable future. In addition, we are subject to several covenants under our debt arrangements that place restrictions on our ability to pay dividends. The payment of dividends will be at the discretion of our Board of Directors and will depend on our results of operations, capital requirements, financial condition, prospects, contractual arrangements, any limitations on payment of dividends present in our current and future debt agreements, and other factors that our Board of Directors may deem relevant.

CAPITALIZATION

The following table sets forth our capitalization as of September 30, 2010:

- on an actual basis;
- on a pro forma basis to give effect to the conversion of all outstanding shares of convertible preferred stock into common stock and the reclassification of the convertible preferred stock warrant liabilities to additional paid-in capital, each effective upon the closing of this offering; and
- on a pro forma as adjusted basis to also give effect to the pro forma conversions and reclassifications described above and the sale of shares of our common stock in this offering at the assumed initial public offering price of $ per share, the midpoint of the range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this table together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus.

	As of September 30, 2010		
	Actual	Pro Forma	Pro Forma as Adjusted(1)
		(unaudited, in thousands, except per share amounts)	
Long-term debt, net of current portion	$ 11,590	$ 11,590	$
Convertible preferred stock warrant liabilities	397	—	
Convertible preferred stock issuable in series: $0.0035 par value, 20,001 shares authorized, 17,813 shares issued and outstanding (actual); no shares authorized, issued or outstanding (pro forma and pro forma as adjusted)	184,549	—	
Stockholders' equity (deficit):			
Common stock: $0.0035 par value, 29,253 shares authorized, 3,346 shares issued and outstanding (actual); $0.0035 par value, 29,253 shares authorized, 21,159 shares issued and outstanding (pro forma); $ par value, shares authorized, shares issued and outstanding (pro forma as adjusted)	12	74	
Preferred stock: $0.0035 par value, no shares authorized, issued or outstanding (actual and pro forma); $ par value, shares authorized, no shares issued or outstanding (pro forma as adjusted)	—	—	
Additional paid-in capital(1)	10,594	195,478	
Accumulated other comprehensive loss	(752)	(752)	
Accumulated deficit	(196,249)	(196,249)	
Total stockholders' (deficit) equity (1)	(186,395)	(1,449)	
Total capitalization(1)	$ 10,141	$ 10,141	

(1) A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the range set forth on the cover page of this prospectus, would increase (decrease) each of additional paid-in capital, total stockholders' equity and total capitalization by $ million, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. Each increase of 1.0 million shares in the number of shares offered by us would increase additional paid-in capital, total stockholders' equity and total capitalization by approximately $ million. Similarly, each decrease of 1.0 million shares in the number of shares offered by us, would decrease additional paid-in capital, total stockholders' equity and total capitalization by approximately $ million. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and terms of this offering determined at pricing.

The table above excludes the following shares:

- 3,195,172 shares of common stock issuable upon exercise of options outstanding as of September 30, 2010, at a weighted average exercise price of $2.42 per share;
- 668,845 shares of common stock issuable upon the exercise of warrants outstanding as of September 30, 2010, at a weighted average exercise price of $10.03 per share, after conversion of our convertible preferred stock;
- shares of common stock reserved for future issuance under our stock-based compensation plans, including shares of common stock reserved for issuance under our 2011 Equity Incentive Plan, and any future increase in shares reserved for issuance under such plan, each of which will become effective on the date of this prospectus; and
- 417 shares of common stock that were issued and outstanding but were not included in stockholders' deficit as of September 30, 2010, pursuant to accounting principles generally accepted in the United States, as these shares were subject to a right of repurchase by us.

DILUTION

If you invest in our common stock, your interest will be diluted to the extent of the difference between the amount per share paid by purchasers of shares of common stock in this initial public offering and the pro forma as adjusted net tangible book value per share of common stock immediately after completion of this offering.

Our pro forma net tangible book deficit as of September 30, 2010 in the amount of $ million, or $ per share, was based on the total number of shares of our common stock outstanding as of September 30, 2010, after giving effect to the conversion of all outstanding shares of our convertible preferred stock into common stock and the reclassification of the convertible preferred stock warrant liabilities to additional paid-in capital, each effective upon the closing of this offering.

After giving effect to our sale of shares of common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses, our pro forma as adjusted net tangible book value as of September 30, 2010 would have been $ million, or $ per share. This represents an immediate increase in net tangible book value of $ per share to existing stockholders and an immediate dilution in net tangible book value of $ per share to purchasers of common stock in this offering, as illustrated in the following table:

Assumed initial public offering price per share		$
Pro forma net tangible book deficit per share as of September 30, 2010	$	
Increase in pro forma as adjusted net tangible book value per share attributable to new investors	$	
Pro forma as adjusted net tangible book value per share after this offering		$
Pro forma dilution per share to new investors in this offering		$

Each $1.00 increase (decrease) in the assumed public offering price of $ per share, the midpoint of the range set forth on the cover of this prospectus, would increase (decrease) our pro forma as adjusted net tangible book value by approximately $ million, or approximately $ per share, and the pro forma dilution per share to investors in this offering by approximately $ per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase of 1.0 million shares in the number of shares offered by us, would result in a pro forma as adjusted net tangible book value of approximately $ million, or $ per share, and the pro forma dilution per share to investors in this offering would be $ per share. Similarly, a decrease of 1.0 million shares in the number of shares offered by us, would result in an pro forma as adjusted net tangible book value of approximately $ million, or $ per share, and the pro forma dilution per share to investors in this offering would be $ per share. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

If the underwriters' over-allotment option is exercised in full, the pro forma as adjusted net tangible book value per share after this offering would be $ per share, the increase in pro forma as adjusted net tangible book value per share to existing stockholders would be $ per share and the dilution to new investors purchasing shares in this offering would be $ per share.

The following table presents on a pro forma as adjusted basis as of September 30, 2010, after giving effect to the automatic conversion of all outstanding shares of convertible preferred stock into common stock, the differences between the existing stockholders and the purchasers of shares in this offering with respect to the

number of shares purchased from us, the total consideration paid, which includes net proceeds received from the issuance of common and convertible preferred stock, cash received from the exercise of stock options, the value of any stock issued for services and the proceeds from the issuance of convertible promissory notes which were subsequently converted to shares of convertible preferred stock, and the average price paid per share (in thousands, except per share amounts and percentages):

	Shares Purchased		Total Consideration(1)		Average Price per Share
	Number	Percent	Amount	Percent	
Existing stockholders	21,159	%		%	
New investors					
Totals		100.0%	$	%	$

(1) Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the range set forth on the cover page of this prospectus, would increase (decrease) the total consideration paid to us by new investors and total consideration paid to us by all stockholders by $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase of 1.0 million shares in the number of shares offered by us would increase the total consideration paid to us by new investors and total consideration paid to us by all stockholders by $ million. Similarly, a decrease of 1.0 million shares in the number of shares offered by us would decrease the total consideration paid to us by new investors and total consideration paid to us by all stockholders by $ million.

If the underwriters exercise their over-allotment option in full, our existing stockholders would own % and our new investors would own % of the total number of shares of our common stock outstanding after this offering.

The table above excludes the following shares:

- 3,195,172 shares of common stock issuable upon exercise of options outstanding as of September 30, 2010, at a weighted average exercise price of $2.42 per share;
- 668,845 shares of common stock issuable upon the exercise of warrants outstanding as of September 30, 2010, at a weighted average exercise price of $10.03 per share, after conversion of our convertible preferred stock;
- shares of common stock reserved for future issuance under our stock-based compensation plans, including shares of common stock reserved for issuance under our 2011 Equity Incentive Plan, and any future increase in shares reserved for issuance under such plan, each of which will become effective on the date of this prospectus; and
- 417 shares of common stock that were issued and outstanding but were not included in stockholders' deficit as of September 30, 2010, pursuant to accounting principles generally accepted in the United States, as these shares were subject to a right of repurchase by us.

To the extent that any of these options or warrants are exercised, new options are issued under our stock-based compensation plans or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering.

SELECTED CONSOLIDATED FINANCIAL DATA

We have derived the selected consolidated statement of operations data for the years ended December 29, 2007, December 27, 2008 and December 31, 2009, and the selected consolidated balance sheet data as of December 27, 2008 and December 31, 2009 from our audited consolidated financial statements included elsewhere in this prospectus. The report of our independent registered public accounting firm on our consolidated financial statements for the year ended December 31, 2009, which appears elsewhere in this prospectus, includes an explanatory paragraph that describes an uncertainty about our ability to continue as a going concern. We have derived the summary consolidated statement of operations data for the nine months ended September 30, 2009 and 2010, and the consolidated balance sheet data as of September 30, 2010 from our unaudited consolidated financial statements included elsewhere in this prospectus. We have derived the selected consolidated statement of operations data for the years ended December 31, 2005 and 2006 and the selected consolidated balance sheet data as of December 31, 2005 and 2006 and December 29, 2007 from our audited consolidated financial statements not included in this prospectus. Our historical results are not necessarily indicative of the results to be expected for any future period. The following selected consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus.

	Year Ended					Nine Months Ended	
	December 31, 2005	December 31, 2006	December 29, 2007	December 27, 2008	December 31, 2009	September 30, 2009	September 30, 2010
	(in thousands, except per share amounts)						
Consolidated Statement of Operations Data:							
Revenue:							
Product revenue	$ 6,076	$ 3,959	$ 4,451	$ 13,364	$ 23,599	$ 16,369	$ 20,883
Collaboration revenue	1,568	1,376	460	70	—	—	975
Grant revenue	30	1,063	2,364	1,913	1,813	1,420	1,347
Total revenue	7,674	6,398	7,275	15,347	25,412	17,789	23,205
Costs and expenses:							
Cost of product revenue	4,764	2,773	3,514	8,364	11,486	8,404	7,999
Research and development	11,449	15,589	14,389	14,015	12,315	9,249	10,097
Selling, general and administrative	7,955	9,699	12,898	22,511	19,648	14,386	17,672
Total costs and expenses	24,168	28,061	30,801	44,890	43,449	32,039	35,768
Loss from operations	(16,494)	(21,663)	(23,526)	(29,543)	(18,037)	(14,250)	(12,563)
Interest expense	(898)	(2,261)	(2,790)	(2,031)	(2,876)	(1,849)	(1,620)
Gain (loss) from changes in the fair value of convertible preferred stock warrants, net	72	(139)	(245)	769	(135)	180	210
Interest income	340	565	1,140	766	37	33	7
Other income (expense), net	(42)	(55)	75	393	1,833	189	284
Loss before income taxes and cumulative of change in accounting principle	(17,022)	(23,553)	(25,346)	(29,646)	(19,178)	(15,697)	(13,682)
(Provision) benefit for income taxes	—	—	(105)	147	50	(3)	(142)
Loss before cumulative effect of change in accounting principle	(17,022)	(23,553)	(25,451)	(29,499)	(19,128)	(15,700)	(13,824)
Cumulative effect of change in accounting principle	637	—	—	—	—	—	—
Net loss	$ (16,385)	$ (23,553)	$ (25,451)	$ (29,499)	$ (19,128)	$ (15,700)	$ (13,824)
Net loss per share of common stock, basic and diluted(1)	$ (6.35)	$ (8.82)	$ (9.21)	$ (10.32)	$ (6.37)	$ (5.34)	$ (4.26)
Shares used in computing net loss per share of common stock, basic and diluted(1)	2,580	2,671	2,765	2,859	3,004	2,939	3,246
Pro forma net loss per share of common stock, basic and diluted (unaudited)(1)					$ (0.96)		$ (0.67)
Shares used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)(1)					19,710		20,975

(1) Please see Note 2 to our audited consolidated financial statements for an explanation of the method used to calculate basic and diluted net loss per share and basic and diluted pro forma net loss per share of common stock for the year ended December 31, 2009. Please see Note 1 to our interim condensed consolidated financial statements for an explanation of the method used to calculate basic and diluted net loss per share and basic and diluted pro forma net loss per share of common stock for the nine months ended September 30, 2010.

	As of					
	December 31, 2005	December 31, 2006	December 29, 2007	December 27, 2008	December 31, 2009	September 30, 2010
	(in thousands)					
Consolidated Balance Sheet Data:						
Cash, cash equivalents and available for sale securities	$ 19,659	$ 25,518	$ 40,363	$ 17,796	$ 14,602	$ 5,083
Working capital	14,764	23,939	38,754	20,704	21,354	6,817
Total assets	27,750	36,493	54,776	32,354	32,153	22,090
Total long-term debt	16,800	12,838	9,362	15,212	14,461	14,610
Convertible promissory notes	—	13,072	4,997	—	—	—
Convertible preferred stock warrants	814	223	468	141	616	397
Convertible preferred stock	88,966	112,295	162,082	167,538	183,845	184,549
Total stockholders' deficit	(83,154)	(106,172)	(130,331)	(158,339)	(173,619)	(186,395)

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of the financial condition and results of our operations should be read in conjunction with the consolidated financial statements and related notes included elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below. Factors that could cause or contribute to such differences include, but are not limited to, those identified below, and those discussed in the section titled "Risk Factors" included elsewhere in this prospectus.

Overview

We develop, manufacture and market microfluidic systems for growth markets in the life science and agricultural biotechnology, or Ag-Bio, industries. Our proprietary microfluidic systems consist of instruments and consumables, including chips and reagents. These systems are designed to significantly simplify experimental workflow, increase throughput and reduce costs, while providing the excellent data quality demanded by customers. In addition, our proprietary technology enables genetic analysis that in many instances was previously impractical. We actively market three microfluidic systems including eight different commercial chips to leading pharmaceutical and biotechnology companies, academic institutions, diagnostic laboratories and Ag-Bio companies. We have sold systems to over 200 customers in over 20 countries worldwide.

Our total revenue grew from $6.4 million in 2006 to $25.4 million in 2009 and was $23.2 million in the nine months ended September 30, 2010. We have incurred significant net losses since our inception in 1999 and, as of September 30, 2010, our accumulated deficit was $196.2 million.

In 2003, we introduced our first product line, the TOPAZ system for protein crystallization. In the fourth quarter of 2006, we launched our BioMark system for gene expression analysis, genotyping and digital PCR. In the third quarter of 2008, we launched our EP1 system for SNP genotyping and digital PCR. In the third quarter of 2009, we launched our Access Array system for target enrichment that is compatible with all currently marketed next generation DNA sequencers. In the third quarter of 2010, we launched our multi-use chips for high-throughput genotyping. Our systems are based on one or more chips designed for particular applications and include specialized instrumentation and software, as well as reagents for certain applications.

We distribute our microfluidic systems through our direct sales force and support organizations located in North America, Europe and Asia-Pacific and through distributors or sales agents in several European, Latin American and Asia-Pacific countries. Our manufacturing operations are located in Singapore. Our facility in Singapore manufactures our instruments and fabricates all of our chips for commercial sale and some chips for our own research and development purposes. Our South San Francisco facility fabricates chips for our own research and development purposes.

Since 2002, we have received revenue from government grants. Our most significant grant relationship has been with the Singapore Economic Development Board, or EDB. The EDB, an agency of the Government of Singapore, promotes research, development and manufacturing activities in Singapore and associated employment of Singapore nationals by providing incentive grants to companies willing to conduct operations in Singapore and satisfy the requirements of EDB's government programs. Under our agreements with EDB, we are eligible to receive incentive grant payments from EDB, provided we satisfy certain agreed upon targets. Our agreements with EDB provide for incentive funding eligibility through May 2011. From January 1, 2007 through September 30, 2010, we recognized $6.0 million of grant revenue from EDB.

Fiscal Year Presentation

Our 2007 and 2008 fiscal years were based on a 52- or 53-week convention and, accordingly, our 2007 fiscal year refers to the year ended on December 29, 2007, and our 2008 fiscal year refers to the year ended on

December 27, 2008. During 2009, we adopted the calendar year as our fiscal year and, accordingly, our 2009 fiscal year refers to the year ended on December 31, 2009.

Critical Accounting Policies, Significant Judgments and Estimates

Our consolidated financial statements and the related notes included elsewhere in this prospectus are prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Changes in accounting estimates may occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

We believe that the following critical accounting policies involve a greater degree of judgment and complexity than our other accounting policies. Accordingly, these are the policies we believe are the most critical to understanding and evaluating our consolidated financial condition and results of operations. Our accounting policies are more fully described in Note 2 of the notes to our audited consolidated financial statements and Note 1 of the notes to our interim consolidated financial statements included elsewhere in this prospectus.

Revenue Recognition

We generate revenue from sales of our products, license arrangements, research and development contracts, collaboration agreements and government grants. Our products consist of instruments and consumables, including chips and reagents, related to our microfluidic systems. Product revenue includes services for instrument installation, training and customer support services. We also have entered into collaboration, license, and research and development contracts and have received government grants to conduct research and development activities.

Revenue is recognized when all of the following criteria are met: persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price to the buyer is fixed or determinable and collectibility is reasonably assured. The evaluation of these revenue recognition criteria requires significant management judgment. For instance, we use judgment to assess collectibility based on factors such as the customer's creditworthiness and past collection history, if applicable. If we determine that collection of a payment is not reasonably assured, revenue recognition is deferred until receipt of payment. We also use judgment to assess whether a price is fixed or determinable including but not limited to, reviewing contractual terms and conditions related to payment terms.

Some of our sales contracts, which include those for our BioMark systems, involve the delivery or performance of multiple products or services within contractually binding arrangements. Significant contract interpretation is sometimes required to determine the appropriate accounting, including whether the deliverables specified in a multiple element arrangement should be treated as separate units of accounting for revenue recognition purposes, and, if so, how the related sales price should be allocated among the elements, when to recognize revenue for each element, and the period over which revenue should be recognized. Revenue recognition for contracts with multiple deliverables is based on the individual units of accounting determined to exist in the contract. A delivered element is considered a separate unit of accounting when the delivered element has value to the customer on a stand-alone basis. Elements are considered to have stand-alone value when they are sold separately or when the customer could resell the element on a stand-alone basis.

We recognize revenue for delivered elements only when we determine that the fair values of undelivered elements are known. If the fair value of an undelivered element cannot be objectively determined, revenue will

be deferred until all elements are delivered, or until fair value can objectively be determined for any remaining undelivered elements. We use judgment to evaluate whether there is vendor specific objective evidence, or VSOE, of fair value of the undelivered elements, determined by reference to stand-alone sales of such elements.

For a multiple element arrangement that includes both chips and instruments, we separate these elements into separate units of accounting as we consider these elements to have stand alone value to the customer. We do not sell software separately; however, we offer post-contract software support services for certain of our instruments that contain software that is essential to their functionality. If the only undelivered element is post-contract software support services for which VSOE has not been established, the entire arrangement consideration is recognized ratably over the service period. The corresponding costs of products sold under multiple element revenue arrangements are recognized consistent with the related revenue recognition.

During 2007 and the six months ended June 28, 2008, we did not have VSOE of fair value for post-contract software support services. Therefore revenue and the corresponding costs were deferred and recognized over the post-contract software support period.

Beginning in the third quarter of 2008, we established VSOE of fair value for post-contract software support services and began recognizing revenue for the fair value of the delivered element of an arrangement upon installation.

Until the third quarter of 2009, installation was considered to be essential to the functionality of our BioMark instruments and, accordingly, revenue recognition for these instruments began upon installation.

During the third quarter of 2009, we began shipping our BioMark instruments in a fully assembled and calibrated form and concluded that installation was no longer essential to the functionality of these instruments. The installation process for our instruments may be performed by the customer or an independent third party. Therefore, we treat the instruments and installation as separate units of accounting. As a result, beginning in the fourth quarter of 2009, instrument revenue is recognized upon delivery, provided that other applicable revenue recognition criteria have been satisfied. Installation revenue is recognized when the installation service is complete.

Revenues from the sales of our products that are not part of multiple element arrangements are recognized when no significant obligations remain undelivered and collection of the receivables is reasonably assured, which is generally when delivery has occurred. Delivery occurs when there is a transfer of title and risk of loss passes to the customer.

Accruals for estimated warranty expenses are provided for at the time that the associated revenue is recognized. We use judgment to estimate these accruals and, if we were to experience an increase in warranty claims or if costs of servicing our products under warranty were greater than our estimates, our cost of product revenue could be adversely affected in future periods.

We have entered into collaboration and research and development arrangements that generally provide us with up-front and periodic milestone fees or fees based on agreed upon rates for time incurred by our research staff. For collaboration and research and development agreements, up-front fees are generally recognized over the term of the agreement; milestone fees are generally recognized when the milestones are achieved; and fees based on agreed-upon rates for time incurred by our research staff are recognized as time is incurred on the project.

Revenue from government grants relates to the achievement of agreed upon milestones and expenditures and is recognized in the period in which the related costs are incurred, provided that the conditions under which the government grants are awarded have been substantially met and only perfunctory obligations remain outstanding. With respect to the EDB grants, we receive incentive grant payments upon satisfaction of grant conditions in amounts equal to a portion of the qualifying expenses we incur in Singapore. Qualifying expenses

include salaries, overhead, outsourcing and subcontracting expenses, operating expenses and royalties paid. Expenses not qualifying for the incentive grant program include raw materials purchases. We submit requests to EDB for incentive grant payments on a quarterly basis, and these requests are subject to EDB's review and our satisfaction of the grant conditions.

Changes in judgments and estimates regarding application of these revenue recognition guidelines as well as changes in facts and circumstances could result in a change in the timing or amount of revenue recognized in future periods.

Stock-Based Compensation

We measure the cost of employee services received in exchange for an award of equity instruments, including stock options, based on the grant date fair value of the award. The fair value of options on the grant date is estimated using the Black-Scholes option-pricing model, which requires the use of certain subjective assumptions including expected term, volatility, risk-free interest rate and the fair value of our common stock. These assumptions generally require significant judgment.

The resulting costs, net of estimated forfeitures, are recognized over the period during which an employee is required to provide service in exchange for the award, usually the vesting period. We amortize the fair value of stock-based compensation on a straight-line basis over the requisite service periods.

For performance-based stock options, we recognize stock-based compensation over the requisite service periods using the accelerated attribution method.

We account for stock options issued to nonemployees at their estimated fair value determined using the Black-Scholes option-pricing model. The fair value of the options granted to nonemployees is remeasured as they vest, and the resulting change in value, if any, is recognized as expense during the period the related services are rendered.

Our expected volatility is derived from the historical volatilities of several unrelated public companies within the life science industry because we have little information on the volatility of the price of our common stock since we have no trading history. When making the selections of our industry peer companies to be used in the volatility calculation, we also considered the stage of development, size and financial leverage of potential comparable companies. These historical volatilities are weighted based on certain qualitative factors and combined to produce a single volatility factor. The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant for zero coupon U.S. Treasury notes with maturities approximately equal to each grant's expected life. We estimate the expected lives of employee options using the simplified method as the mid-point of the expected time-to-vest and the contractual term. For out of the money option grants, we estimate the expected lives based on the mid-point of the expected time to a liquidity event and the contractual term.

The fair value of each new employee option awarded was estimated on the grant date for the periods below using the Black-Scholes option-pricing model with the following assumptions:

	Fiscal Year			Nine Months Ended September 30,	
	2007	2008	2009	2009	2010
Expected volatility	63.0%	53.8%	59.1%	55.0%	59.3%
Expected life	6.0 years	6.0 years	5.7 years	6.1 years	5.8 years
Risk-free interest rate	4.4%	3.2%	2.4%	1.6%	2.1%
Dividend yield	0%	0%	0%	0%	0%

If in the future we determine that another method is more reasonable, or if another method for calculating these input assumptions is prescribed by authoritative guidance, and, therefore, should be used to estimate

expected volatility or expected life, the fair value calculated for our stock options could change significantly. Higher volatility and longer expected lives result in an increase to stock-based compensation expense determined at the date of grant. Stock-based compensation expense affects our cost of product revenue, research and development expense, and selling, general and administrative expense.

We estimate our forfeiture rate based on an analysis of our actual forfeitures and will continue to evaluate the appropriateness of the forfeiture rate based on actual forfeiture experience, analysis of employee turnover behavior and other factors. Quarterly changes in the estimated forfeiture rate can have a significant effect on reported stock-based compensation expense, as the cumulative effect of adjusting the rate for all expense amortization is recognized in the period the forfeiture estimate is changed. If a revised forfeiture rate is higher than the previously estimated forfeiture rate, an adjustment is made that will result in a decrease to the stock-based compensation expense recognized in the consolidated financial statements. If a revised forfeiture rate is lower than the previously estimated forfeiture rate, an adjustment is made that will result in an increase to the stock-based compensation expense recognized in the consolidated financial statements. The effect of forfeiture adjustments was insignificant during 2007, 2008, 2009 and the nine months ended September 30, 2010. We will continue to use judgment in evaluating the expected term, volatility and forfeiture rate related to our stock-based compensation.

Also required to compute the fair value calculation of options is the fair value of the underlying common stock. We have historically granted stock options with exercise prices no less than the fair value of our common stock as determined at the date of grant by our Board of Directors with input from management. The following table summarizes, by grant date, the number of stock options granted since January 1, 2009 and the associated per share exercise price, which was not less than the fair value of our common stock for each of these grants.

Grant Date	Number of Options Granted	Exercise Price Per Share of Common Stock	Fair Value Per Share of Common Stock
November 17, 2009	520,323	$ 2.36	$ 2.36
December 23, 2009	1,385,096	$ 2.57	$ 2.57
January 28, 2010	98,300	$ 2.57	$ 2.57
May 6, 2010	258,600	$ 2.57	$ 1.82
August 26, 2010	283,250	$ 2.57	$ 1.98

Given the absence of an active market for our common stock prior to this offering, our Board of Directors determined the estimated fair value of our common stock based on an analysis of relevant metrics, including the following:

- the contemporaneous valuations of our common stock by an unrelated third party;
- the prices of our convertible preferred stock sold to outside investors in arms-length transactions;
- the rights, preferences and privileges of our convertible preferred stock relative to those of our common stock;
- the rights of freestanding warrants and other similar instruments related to shares that are redeemable;
- our operating and financial performance;
- our capital resources and financial condition;
- the hiring of key personnel;
- the introduction of new products;
- our stage of development;
- the fact that the option grants involve illiquid securities in a private company;
- the risks inherent in the development and expansion of our products and services; and

- the likelihood of achieving a liquidity event, such as an initial public offering or sale of our company given prevailing market conditions.

For all grants of stock options during the periods for which financial statements are included in this prospectus, our board of directors determined the fair value of our common stock based on an evaluation of the factors discussed above as of the date of each grant, including a contemporaneous unrelated third-party valuation of our common stock.

The unrelated third-party valuations were prepared using the income or discounted cash flow approach to estimate our aggregate enterprise value at each valuation date. The income approach measures the value of a company as the present value of its future economic benefits by applying an appropriate risk-adjusted discount rate to expected cash flows, based on forecasted revenue and costs. We prepared a financial forecast for each valuation date to be used in the computation of the enterprise value for the income approach. The financial forecasts took into account our past experience and future expectations. The risks associated with achieving these forecasts were assessed in selecting the appropriate discount rate. There is inherent uncertainty in these estimates.

In order to arrive at the estimated fair value of our common stock, the indicated enterprise value of our company calculated at each valuation date using the income approach was allocated to the shares of convertible preferred stock and the warrants to purchase these shares, and shares of common stock and the options to purchase these shares using an option-pricing methodology. The option-pricing method treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common stock has value only if the funds available for distribution to stockholders exceed the value of the liquidation preference at the time of a liquidity event, such as a strategic sale, merger or initial public offering, assuming the enterprise has funds available to make a liquidation preference meaningful and collectable by the holders of preferred stock. The common stock is modeled as a call option on the underlying equity value at a predetermined exercise price. In the model, the exercise price is based on a comparison with the total equity value rather than, as in the case of a regular call option, a comparison with a per share stock price. Thus, common stock is considered to be a call option with a claim on the enterprise at an exercise price equal to the remaining value immediately after the preferred stock is liquidated. The option-pricing method uses the Black-Scholes option-pricing model to price the call options. This model defines the securities' fair values as functions of the current fair value of a company and uses assumptions such as the anticipated timing of a potential liquidity event, marketability, cost of capital and the estimated volatility of the equity securities. The anticipated timing of a liquidity event utilized in these valuations was based on then-current plans and estimates of our Board of Directors and management regarding a liquidity event. Estimates of the volatility of our stock were based on available information on the volatility of capital stock of comparable publicly traded companies. This approach is consistent with the methods outlined in the AICPA Practice Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. Also, the valuation firm considered the fact that our stockholders cannot freely trade our common stock in the public markets. Therefore, the estimated fair value of our common stock at each grant date reflected a non-marketability discount.

There is inherent uncertainty in these estimates and if we or the valuation firm had made different assumptions than those described above, the amount of our stock-based compensation expense, net loss and net loss per share amounts could have been significantly different.

Our board of directors obtained contemporaneous valuations from an unrelated third-party valuation firm in connection with each of the following grants, which it considered together with the other factors discussed above, to determine the fair value of our common stock on each grant date. Our board of directors determined a fair value of $2.36 per share of our common stock for grants made on November 17, 2009. For the grant of options on December 23, 2009 and January 28, 2010, our board determined a fair value of $2.57 per share of our common stock on both such dates. The increase in fair value between November 17, 2009 and the grants on December 23, 2009 and January 28, 2010 related primarily to the passage of time which meant that future cash

flows were discounted over a shorter period under the income approach. For the grant of options on May 6, 2010, our board determined a fair value of $1.82 per share of our common stock; however, options were granted by our board on May 6, 2010 at a price per share of $2.57 based on the board's decision to maintain equality in exercise price with the recipients of grants on December 23, 2009. The decrease in fair value between January 28, 2010 and May 6, 2010 related to lower sales projections, lower cash balances, an increase in the discount for lack of marketability and a longer assumed holding period. For the grant of options on August 26, 2010, our Board determined a fair value of $1.98 per share of our common stock on the grant date; however, again options were granted with an exercise price per share of $2.57. The increase in fair value between May 6, 2010 and August 26, 2010 related to an increase in our sales projections and a decrease in both the discount rate for future cash flows and the discount for lack of marketability due to a shorter assumed holding period.

In November 2009, we offered our eligible stock option holders the opportunity to exchange eligible options for new options with an exercise price per share equal to the fair market value of our common stock on December 23, 2010. In approving the exchange offer, our board of directors noted that the principal purpose of the our equity compensation program is to attract and retain personnel required for the success of our business and that a large number of optionees held options to purchase shares of our common stock with exercise prices well above the then-current fair market value of our common stock, and, as a result, our equity compensation program was not having the intended effect of attracting and motivating personnel. Our board of directors concluded that the exchange offer would encourage the continued service of valued service providers critical to our continued success. Options that were eligible to participate in the offer were those that were granted with an exercise price greater than $2.36 per share and remained outstanding and unexercised on December 22, 2009, the expiration date of the offer. All employees (including officers), directors, and consultants as of the commencement date of the offer, were eligible to participate provided they remained service providers through December 22, 2009. Approximately 1,385,000 options were exchanged. New options granted had similar terms and conditions as the exchanged options, except that the exercise price per share of the new options is equal to the per share fair value of our common stock on December 23, 2009 of $2.57 and the new options were subject to an additional three months of vesting. The exchange resulted in incremental stock based compensation expense of $0.7 million of which $0.4 million was recognized immediately on December 23, 2009 and $0.3 million will be recognized over the remaining vesting periods, which range from three months to four years from December 23, 2009.

Certain of our stock options are granted to officers with vesting acceleration features based upon the achievement of certain performance milestones. The timing of the attainment of these milestones may affect the timing of expense recognition since we recognize compensation expense only for the portion of stock options that are expected to vest.

We recorded stock-based compensation of $0.7 million, $2.0 million, $2.1 million, $1.2 million and $1.3 million during 2007, 2008, 2009, the nine months ended September 30, 2009 and the nine months ended September 30, 2010, respectively. As of September 30, 2010, we had $2.1 million of unrecognized stock-based compensation costs, which are expected to be recognized over an average period of 2.0 years.

Accounting for Income Taxes

We use the asset and liability method of accounting for income taxes. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Significant management judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against our deferred tax assets. Our provision for income taxes generally consists of tax expense related to current period earnings. As part of the process of preparing our consolidated financial statements, we continuously monitor the circumstances impacting the expected realization of our deferred tax assets for each

jurisdiction. We consider all available evidence, including historical operating results in each jurisdiction, expectations and risks associated with estimates of future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for a valuation allowance. To the extent a deferred tax asset cannot be recognized a valuation allowance is established to reduce our deferred tax assets to the amount that is more likely than not to be realized. We have recorded a full valuation allowance on our deferred tax assets due to uncertainties related to our ability to utilize our deferred tax assets in the foreseeable future. These deferred tax assets primarily consist of net operating loss carryforwards and research and development tax credits. We intend to maintain this valuation allowance until sufficient evidence exists to support its reduction. We make estimates and judgments about our future taxable income that are based on assumptions that are consistent with our plans and estimates. Should the actual amounts differ from our estimates, the amount of our valuation allowance could be materially impacted. Changes in these estimates may result in significant increases or decreases to our tax provision in a period in which such estimates are changed which in turn would affect net income.

Inventory Valuation

We record adjustments to inventory for potentially excess, obsolete, slow-moving or impaired goods in order to state inventory at its net realizable value. The business environment in which we operate is subject to rapid changes in technology and customer demand. We regularly review inventory for excess and obsolete products and components, taking into account product life cycle and development plans, product expiration and quality issues, historical experience and our current inventory levels. If actual market conditions are less favorable than anticipated, additional inventory adjustments could be required.

Warrants to Purchase Convertible Preferred Stock

We account for freestanding warrants to purchase shares of our convertible preferred stock as liabilities because the warrants may conditionally obligate us to transfer assets at some point in the future. The warrants are subject to remeasurement at each balance sheet date, and any change in fair value is recognized as a component of other income (expense), net in the consolidated statements of operations. We estimated the fair value of these warrants at the respective balance sheet dates using the Black-Scholes option-pricing model.

We will continue to record adjustments to the fair value of the warrants until they are exercised, expire or, upon the closing of an initial public offering, become warrants to purchase shares of our common stock, at which time the warrants will no longer be accounted for as a liability. At that time, the then-current aggregate fair value of these warrants will be reclassified from current liabilities to additional paid-in capital, a component of stockholders' equity, and we will cease to record any related periodic changes in fair value.

Results of Operations

Revenue

We generate revenue from sales of our products, collaboration agreements and government grants. Our product revenue consists of sales of instruments and related services, and consumables, including chips and reagents. We also have entered into collaboration agreements, research and development contracts and have received government grants to conduct research and development activities.

The following table presents our revenue by source for each period presented (in thousands).

	Fiscal Year			Nine Months Ended September 30,	
	2007	2008	2009	2009	2010
Revenue:					
Instruments	$2,682	$10,477	$17,318	$12,523	$14,032
Consumables	1,769	2,887	6,281	3,846	6,851
Product revenue	4,451	13,364	23,599	16,369	20,883
Collaboration revenue	460	70	—	—	975
Grant revenue	2,364	1,913	1,813	1,420	1,347
Total revenue	$7,275	$15,347	$25,412	$17,789	$23,205

The following table presents our product revenue by geography and as a percentage of total product revenue by geography based on the billing address of our customers for each period presented (in thousands).

	Fiscal Year						Nine Months Ended September 30,			
	2007		2008		2009		2009		2010	
United States	$2,426	55%	$ 6,912	52%	$12,630	54%	$ 8,260	50%	$12,028	58%
Europe	735	17%	3,172	24%	4,885	21%	3,365	21%	4,768	23%
Japan	732	16%	1,645	12%	3,172	13%	2,741	17%	1,568	8%
Asia Pacific	558	12%	1,431	11%	2,162	9%	1,369	8%	2,053	10%
Other	—	—%	204	1%	750	3%	634	4%	466	1%
Total	$4,451	100%	$13,364	100%	$23,599	100%	$16,369	100%	$20,883	100%

Grant revenue is primarily generated in Singapore. Collaboration revenue is primarily generated in the United States. As we expand our business in Europe, Latin America and Asia Pacific, we expect our product revenue from outside of the United States to increase as a percentage of our total product revenue.

Our customers include pharmaceutical and biotechnology companies, academic research institutions, diagnostic laboratories and Ag-Bio companies worldwide. Total revenue from our five largest customers in each of the periods presented comprised 48%, 32%, 20% and 18% of revenue in 2007, 2008, 2009, and the nine months ended September 30, 2010, respectively.

Comparison of the Nine Months Ended September 30, 2009 and September 30, 2010

Total Revenue

Total revenue increased $5.4 million, or 30%, to $23.2 million for the nine months ended September 30, 2010 as compared to $17.8 million for the nine months ended September 30, 2009.

Product Revenue

Product revenue increased by $4.5 million, or 28%, to $20.9 million for the nine months ended September 30, 2010 as compared to $16.4 million for the nine months ended September 30, 2009. The increase is primarily due to the $3.0 million, or 78%, increase in consumables revenue resulting from the higher installed base of instruments. In addition, instrument revenue increased by $1.5 million, or 12%. Instrument sales volume increased by 44% primarily driven by our Access Array system, which launched in the second half of 2009. Average instrument selling prices were generally lower for the nine months ended September 30, 2010 compared to the same period in 2009 due to increased sales of the Access Array instrument which has a lower average selling price compared to our BioMark and EP1 instruments.

We expect unit sales of both instruments and consumables to continue to increase in future periods as we continue our efforts to grow our customer base and expand our geographic market coverage. However, we expect our average selling prices of our instruments to fluctuate over time based on product mix.

Collaboration Revenue

Collaboration revenue was $1.0 million for the nine months ended September 30, 2010, resulting from a fixed-fee research and development agreement that we entered into in May 2010. The arrangement provided for an up-front fee that is being amortized over the term of the agreement, currently projected to be approximately 15 months. We also recognized revenue from the achievement of milestones during the period. We expect to receive additional milestone fees as and when we achieve additional milestones, as specified in the agreement. In the nine months ended September 30, 2009, we did not have any research and development arrangements in place.

Grant Revenue

Grant revenue consists of incentive grants from government entities, primarily EDB. Grant revenue decreased $0.1 million, or 5%, to $1.3 million for the nine months ended September 30, 2010 compared to $1.4 million for the nine months ended September 30, 2009. The decrease relates to a reduction in activity for the EDB grant agreement as we reach certain milestones. Under our incentive grant agreements with EDB, eligible expenses incurred by us in Singapore were $3.4 million for the nine months ended September 30, 2010 and $2.7 million in the nine months ended September 30, 2009.

Our agreements with EDB provide that grants extended to us are subject to our operation of increasing levels of research, development and manufacturing in Singapore, including the use of local service providers, the hiring and training of personnel in Singapore, the incurrence of research and development expenses in Singapore, our receipt of new investment in our company and our achievement of certain agreed upon milestones relating to the development of our products. Development and manufacturing milestones achieved include completion of feasibility studies and prototype development, establishment of manufacturing lines, process automation and manufacturing yield improvements for our chips and related instruments. These agreements further provided EDB with the right to demand repayment of a portion of past grants in the event that we did not meet our obligations under the applicable agreements. Based on correspondence with EDB, we believe we have satisfied our obligations applicable to our EDB grant revenue through September 30, 2010.

We expect total grant revenue for 2010 and future periods to decrease compared to 2009 as the first of our EDB grant agreements was completed during 2010 and the second EDB grant agreement will be completed in 2011.

Cost of Product Revenue

The following table presents our cost of product revenue and product margin for each period presented (in thousands).

	Nine Months Ended September 30,	
	2009	2010
Cost of product revenue	$8,404	$7,999
Product margin	49%	62%

Cost of product revenue includes manufacturing costs incurred in the production process, including component materials, assembly labor and overhead; installation; warranty; service; and packaging and delivery costs. In addition, cost of product revenue includes royalty costs for licensed technologies included in our products, provisions for slow-moving and obsolete inventory and stock-based compensation expense. Costs related to collaboration and grant revenue are included in research and development expense.

Cost of product revenue decreased $0.4 million, or 5%, to $8.0 million for the nine months ended September 30, 2010 from $8.4 million for the nine months ended September 30, 2009. Cost of product revenue as a percentage of related revenue was 38% for the nine months ended September 30, 2010 compared to 51% for the nine months ended September 30, 2009. The decrease in cost of product revenue was primarily due to lower material costs as we sourced more components from local vendors in Asia, improved overhead absorption from increased volumes and improved yields on our chips, and decreased provisions for slow moving and excess and obsolete inventory.

We expect the unit costs of our products to decline in future periods as a result of our ongoing efforts to improve our manufacturing processes coupled with expected increases in production volumes and yields.

Operating Expenses

The following table presents our operating expenses for each period presented (in thousands):

	Nine Months Ended September 30,	
	2009	2010
Research and development	$ 9,249	$10,097
Selling, general and administrative	14,386	17,672
Total operating expenses	$23,635	$27,769

Research and Development

Research and development expense consists primarily of personnel costs, independent contractor costs, prototype and material expenses and other allocated facilities and information technology expenses. We have made substantial investments in research and development since our inception. Our research and development efforts have focused primarily on the tasks required to enhance our technologies and to support development and commercialization of new and existing products and services.

Research and development expense increased $0.8 million, or 9%, to $10.1 million for the nine months ended September 30, 2010 compared to $9.2 million for the nine months ended September 30, 2009. The increase relates primarily to increased headcount related costs of $0.5 million and increased consumption of supplies and consumables of $0.3 million associated with new product introductions and related development and testing. We believe that our continued investment in research and development is essential to our long-term competitive position and expect these expenses to increase in future periods.

Selling, General and Administrative

Selling, general and administrative expense consists primarily of personnel costs for our sales and marketing, business development, finance, legal, human resources and general management, as well as professional services, such as legal and accounting services.

Selling, general and administrative expense increased $3.3 million, or 23%, to $17.7 million for the nine months ended September 30, 2010, compared to $14.4 million for the nine months ended September 30, 2009. The increase was primarily due to increased compensation costs and related expenses of $2.0 million resulting from increased headcount to support our business and revenue growth, increased advertising and promotional costs of $0.3 million to support our new product introductions and to increase market awareness, increased legal and professional fees of $0.5 million, and an increase in our provision for bad debt expense of $0.3 million. We expect selling, general and administrative expense to increase in future periods as we continue to grow our sales,

technical support, marketing and administrative headcount, support increased product sales, broaden our customer base and incur additional costs to support our expanded global footprint and the overall growth in our business. We also expect legal, accounting and compliance costs to increase upon becoming a public company.

Interest Expense, Interest Income and Other Income and Expense, Net

We receive interest income from our cash and cash equivalents. Conversely, we incur interest expense from our long-term debt and convertible promissory notes and the amortization of debt discounts related to these items. The following table presents these items for each period presented (in thousands).

	Nine Months Ended September 30,	
	2009	2010
Interest expense	$(1,849)	$(1,620)
Interest income	33	7
Gains from changes in the fair value of convertible preferred stock warrants, net	180	210
Other income (expense), net	189	284

Interest expense decreased $0.2 million, or 12%, to $1.6 million for the nine months ended September 30, 2010 compared to $1.8 million for the nine months ended September 30, 2009 due to the interest incurred on $10.7 million of convertible notes issued in August 2009 which was converted into convertible preferred stock in November 2009. We expect interest expense to decrease in 2011 as we expect to begin repayment of our outstanding debt.

Gains from changes in the fair value of preferred stock warrants increased $30,000, or 17%, to $210,000 for the nine months ended September 30, 2010 from $180,000 in the nine months ended September 30, 2009 due to a decrease in the warrant liability fair value.

Interest income decreased by $26,000, or 79%, for the nine months ended September 30, 2010 compared to the nine months ended September 30, 2009 due to the decrease in our cash balances during 2010. We expect interest income to increase in 2011 as we invest a portion of the net proceeds from this offering.

Other income (expense) for the nine months ended September 30, 2010 was relatively consistent with the nine months ended September 30, 2009 and primarily consists of foreign currency exchange gains and losses.

Comparison of Years Ended December 27, 2008 and December 31, 2009

The following table presents our revenue by source for each period presented (in thousands).

	Fiscal Year	
	2008	2009
Revenue:		
Instruments	$10,477	$17,318
Consumables	2,887	6,281
Product revenue	13,364	23,599
Collaboration revenue	70	—
Grant revenue	1,913	1,813
Total revenue	$15,347	$25,412

Total Revenue

Total revenue increased $10.1 million, or 66%, to $25.4 million for 2009 as compared to $15.4 million for 2008.

Product Revenue

Product revenue increased by $10.2 million, or 77%, to $23.6 million for 2009 as compared to $13.4 million for 2008. Instrument revenue increased by $6.8 million, or 65% primarily due to a $7.9 million increase in BioMark and EP1 instrument revenue, despite lower average selling prices, partially offset by a $1.1 million decrease in Topaz instrument revenue. Instrument sales volume increased by 173% due primarily to sales of our BioMark instruments and, in part, to sales of our EP1 instruments, which began in the third quarter of 2008. In addition, consumables revenue increased by $3.4 million, or 118%, resulting from the higher installed base of instruments. Our deferred product revenue balance decreased from $1.7 million at December 27, 2008 to $1.0 million at December 31, 2009. The decrease was primarily due to the recognition of revenue on previously deferred sales beginning in the third quarter of 2008.

Grant Revenue

Grant revenue decreased $0.1 million, or 5%, to $1.8 million for 2009 compared to $1.9 million for 2008. The decrease related to a $0.3 million reduction in activity for a grant agreement with the National Institutes of Health, or NIH, which terminated in June 2008 and a decrease of $0.2 million in EDB grants, partially offset by a new grant for $0.3 million entered into in April 2009 with the California Institute for Regenerative Medicine, or CIRM. EDB grant revenue was $1.5 million during 2009, compared to $1.7 million during 2008. Under our incentive grant agreements with EDB, eligible expenses incurred by us in Singapore were $3.7 million in 2009 and $3.7 million in 2008.

Cost of Product Revenue

The following table presents our cost of product revenue and product margin for each period presented (in thousands).

	Fiscal Year	
	2008	2009
Cost of product revenue	$8,364	$11,486
Product margin	37%	51%

Cost of product revenue increased $3.1 million, or 37%, to $11.5 million for 2009 compared to $8.4 million for 2008 primarily due to increases in instrument sales related to our BioMark, EP1 and, to a lesser extent, our Access Array systems. Cost of product revenue as a percentage of product revenue was 49% in 2009 as compared to 63% in 2008. The decrease was primarily due to lower material costs especially for tooling, improved overhead absorption from increased volumes and improved yields on our chips, product efficiencies resulting from transitioning our instrument manufacturing operations from South San Francisco to Singapore, and reduced material costs as we sourced more components from local vendors in Asia, partially offset by increased provisions for slow moving and excess and obsolete inventory.

Operating Expenses

The following table presents our operating expenses for each period presented (in thousands):

	Fiscal Year	
	2008	2009
Operating expenses:		
Research and development	$14,015	$12,315
Selling, general and administrative	22,511	19,648
Total operating expenses	$36,526	$31,963

Research and Development

Research and development expense decreased $1.7 million, or 12%, to $12.3 million for 2009 compared to $14.0 million for 2008. The decrease primarily related to decrease in compensation costs of $0.3 million due to a

decrease in research and development headcount as we transitioned certain of our engineering efforts to our facility in Singapore, a decrease in facility and information technology allocations of $0.4 million as our research and development organization occupied less space in our South San Francisco facility following the transition of certain activities to Singapore and a decrease in consumption of supplies and consumables of $0.7 million.

Selling, General and Administrative

Selling, general and administrative expense decreased $2.9 million, or 13%, to $19.6 million for 2009 compared to $22.5 million for 2008. The decrease was primarily due to initial public offering related costs of $3.4 million recognized in 2008 following the withdrawal of our previous offering in September 2008, a decrease in audit and tax related fees of $0.7 million, a decrease in consulting costs of $0.5 million and a decrease in advertising and promotion costs of $0.4 million. The initial public offering related costs consisted primarily of legal and accounting services and had previously been capitalized. The overall decrease was partially offset by a $1.9 million increase in compensation related costs associated with our increased headcount and an increase in stock-based compensation expense of $0.1 million.

Interest Expense, Interest Income and Other Income and Expense, Net

The following table presents our interest income, interest expense, and other income and expense, net for each period presented (in thousands):

	Fiscal Year	
	2008	2009
Interest expense	$(2,031)	$(2,876)
Interest income	766	37
Gain (loss) from changes in the fair value of convertible preferred stock warrants, net	769	(135)
Other income (expense), net	393	1,833

Interest expense increased $0.8 million, or 42%, to $2.9 million for 2009 compared to $2.1 million for 2008 due to the interest expense related to the issuance of $10.7 million in convertible notes in August 2009.

Interest income decreased by $0.7 million, or 95%, to $37,000 for 2009 compared to $0.8 million for 2008. The decrease in interest income reflects the decrease in our cash and cash equivalents balances during 2009.

Gain (loss) from changes in the fair value of convertible preferred stock warrants decreased by $0.9 million, or 118%, to a $0.1 million loss for 2009 compared to a $0.8 million gain in 2008 due to changes in the fair value of our warrant liability.

Other income (expense) in 2009 increased $1.4 million, or 366%, to $1.8 million in 2009 from $0.4 million in 2008 primarily due to income recognized from our grant of a sub-license to certain intellectual property in 2009.

Comparison of Years Ended December 29, 2007 and December 27, 2008

The following table presents our revenue by source for each period presented (in thousands).

	Fiscal Year	
	2007	2008
Revenue:		
Instruments	$2,682	$10,477
Consumables	1,769	2,887
Product revenue	4,451	13,364
Collaboration revenue	460	70
Grant revenue	2,364	1,913
Total revenue	$7,275	$15,347

Total Revenue

Total revenue increased $8.1 million, or 111%, to $15.3 million for 2008 as compared to $7.3 million for 2007.

Product Revenue

Product revenue increased by $9.0 million, or 202%, to $13.4 million for 2008 compared to $4.5 million for 2007. Revenue from instruments increased by $7.9 million, or 293%, primarily due to higher demand for our BioMark instruments, resulting in an increase in BioMark instrument sales volume of 164%. Revenue from consumables increased by $1.1 million, or 64%, primarily due to our higher installed base of instruments. Our deferred product revenue balance decreased from $2.7 million at December 29, 2007 to $1.7 million at December 27, 2008. The decrease was primarily due to the recognition of revenue on previously deferred sales beginning in the third quarter of 2008.

Collaboration Revenue

Collaboration revenue decreased $0.4 million, or 85%, to $70,000 for 2008 from $0.5 million for 2007, primarily due to the completion of one of our development agreements during 2007.

Grant Revenue

Grant revenue decreased $0.5 million, or 19%, to $1.9 million for 2008 compared to $2.4 million for 2007. The decrease related to a $0.3 million reduction in activity under an NIH grant agreement that terminated in June 2008 and a $0.2 million decrease in grant revenue from EDB. Under our incentive grant agreements with EDB, eligible expenses incurred by us in Singapore were $4.4 million in 2007 and $3.7 million in 2008.

Cost of Product Revenue

The following table presents our cost of product revenue and product margin for each period presented (in thousands):

	Fiscal Year	
	2007	2008
Cost of product revenue	$3,514	$8,364
Product margin	21%	37%

Cost of product revenue increased $4.9 million, or 138%, to $8.4 million for 2008 compared to $3.5 million for 2007, primarily driven by higher instrument sales, start-up costs for our new Singapore manufacturing facility and underutilized capacity as we transitioned manufacturing from the United States to Singapore. Cost of product revenue as a percentage of product revenue was 79% in 2007 compared to 63% in 2008. The decrease was due to the adverse effect of underutilized production capacity in 2007 as we transitioned manufacturing from the United States to Singapore.

Operating Expenses

The following table presents our operating expenses for each period presented (in thousands):

	Fiscal Year	
	2007	2008
Operating expenses:		
Research and development	$14,389	$14,015
Selling, general and administrative	12,898	22,511
Total operating expenses	$27,287	$36,526

Research and Development

Research and development expense decreased $0.4 million, or 3%, to $14.0 million in 2008 from $14.4 million for 2007, primarily due to a decrease in contractor costs of $0.4 million, a decrease in headcount related costs of $0.3 million and a decrease in license costs of $0.1 million, partially offset by higher stock-based compensation of $0.3 million for new hire stock option grants.

Selling, General and Administrative

Selling, general and administrative expense increased by $9.6 million, or 75%, to $22.5 million for 2008 from $12.9 million for 2007 primarily due to costs related to our previously proposed initial public offering that was withdrawn of $3.4 million, increased compensation costs of $4.0 million related to increased headcount, an increase in stock-based compensation of $0.9 million, an increase of $0.9 million in spending primarily for accounting and legal services to support our global expansion and an increase of $0.4 million for advertising and promotions.

Interest Expense, Interest Income and Other Income and Expense, net

The following table presents interest expense, interest income and other income and expense, net for each period presented (in thousands).

	Fiscal Year	
	2007	2008
Interest expense	$(2,790)	$(2,031)
Interest income	1,140	766
Gain (loss) from changes in the fair value of convertible preferred stock warrants, net	(245)	769
Other income (expense), net	75	393

Interest expense decreased by $0.8 million, or 27%, to $2.0 million for 2008 compared to $2.8 million for 2007. The decrease was primarily due to a lower average debt balance following the conversion of $10.0 million of promissory notes in March 2007 and the impact of a convertible promissory note of $5.0 million issued in April 2007. Interest expense for 2008 included interest accrued on $10.0 million in borrowings on our credit line during June 2008.

Interest income for 2008 decreased by $0.4 million, or 33%, to $0.8 million for 2008 compared to $1.1 million for 2007. The decrease in interest income was due to lower cash and cash equivalents and lower interest rates during 2008 as compared to 2007.

Liquidity and Capital Resources

Sources of Liquidity

As of September 30, 2010, we had $5.1 million of cash and cash equivalents compared to $14.6 million as of December 31, 2009. As of September 30, 2010, our working capital totaled $6.8 million. Since our inception, we have principally funded our operations through issuances of convertible preferred stock, which have provided us with aggregate net proceeds of $184.8 million, of which $20.0 million was provided by entities affiliated with EDB in the form of convertible promissory notes that converted into convertible preferred stock and $10.7 million in other loans that were converted into preferred stock. We have also received significant funding in the form of non-convertible loans that have provided us with aggregate net proceeds of $26.6 million. As of September 30, 2010, we had an accumulated deficit of $196.2 million.

We have received funding in the form of grants from government entities, the most significant of which have been associated with two grant agreements with EDB that have helped support the establishment and operation of our Singapore manufacturing, research and development facilities.

Our first grant agreement with EDB was completed in July 2010. The maximum amount of grant revenue available to us under our second grant agreement with EDB from September 30, 2010 through May 31, 2011 is SG$1.1 million (approximately US$0.8 million) although we expect actual grant revenue to be significantly lower.

To maintain eligibility for grant payments under our second grant agreement, we are required to incur annual spending in Singapore of at least SG$6.5 million (approximately US$4.7 million) for the 12 months ended May 31, 2009 and for the twelve months ended May 31, 2010 and at least SG$9.0 million (approximately US$6.5 million) for the 12 months ending May 31, 2011. We met our annual spending requirements in Singapore for the 12 months ended May 31, 2009 and May 31, 2010.

For this purpose, spending in Singapore includes overhead, salaries, outsourcing and subcontracting expenses, operating expenses and royalties paid, with limited exceptions such as raw materials purchases. Expenditures that are used to satisfy the requirements of one grant agreement are not eligible for satisfaction of the other grant agreement. To qualify for payment under the second grant agreement, expenditures must relate to the development of instrumentation for our systems and not our chips.

Our first grant agreement required that we employ at least 23 research scientists and engineers in Singapore by December 31, 2009. Our second grant agreement required that we employ at least 10 new research scientists and engineers in Singapore by May 31, 2009 and that we employ at least 12 new research scientists and engineers in Singapore by May 31, 2011, which may only be satisfied by personnel employed in the research and development of our instruments. In addition, we are required to employ at least 12 research scientists and engineers until May 31, 2013, which may be satisfied by personnel employed in the research and development of either chips or instruments.

As of September 30, 2010, we employed 23 research scientists and engineers involved in the research and development of our chips and 12 research scientists and engineers involved in the research and development of related instrumentation in Singapore.

We cannot assure you that we will take all actions required to remain eligible for grants under our agreements with EDB and, in the event that we do not comply with such requirements, whether intentionally or unintentionally, we may not receive further grants under such agreements. In the event that we do not receive grant funding from EDB in the future, we do not believe that our liquidity would be materially affected.

We have entered into multiple convertible note purchase agreements with Biomedical Sciences Investment Fund Pte. Ltd., or BMSIF, pursuant to which we issued convertible notes and received proceeds in the amount of $21.6 million through September 30, 2010. BMSIF is wholly-owned by EDB Investments Pte. Ltd., whose parent entity is EDB. Ultimately, each of these entities is controlled by the government of Singapore. As of September 30, 2010, there were no outstanding principal and accrued interest balances for our convertible note purchase agreements with BMSIF as the final remaining note was converted into shares of our Series E convertible preferred stock in November 2009.

In March 2005, we entered into a loan and security agreement with a lender under which we borrowed $13.0 million to be used for general corporate purposes. The loan interest rate was 11.5% per annum and the maturity date was February 2010. The loan was subject to prepayment penalties if paid off prior to 2010. In February 2008, this loan and security agreement was amended to provide us with an additional credit line in the amount of $10.0 million that we could draw upon until July 1, 2008 for general corporate purposes. In June 2008, we drew down the $10.0 million. Interest only payments were made monthly through the remainder of 2008 with monthly payments of principal and interest in the amount of $0.4 million, beginning in January 2009, to be made through June 2011. The agreement also required a final payment in the amount of $0.7 million in June 2011, which has been accreted as interest expense over the term of the loan.

In March 2009, we combined and restructured the loan and security agreement discussed above. The restructured loan and security agreement had a final repayment date of March 1, 2012. The interest rate under the loan was 13.5% per annum. Interest only payments were made monthly through February 1, 2010. Commencing on March 1, 2010, we began making monthly payments of $0.6 million for principal and interest with an additional final payment of $2.1 million due in March 2012. The agreement also required payment of fees on March 1, 2012 in the amount of $0.2 million, which, along with the $2.1 million final payment, were being accreted as interest expense over the term of the loan. We were subject to a prepayment fee in the amount of 1.5% of the outstanding principal amount being prepaid. In connection with the execution of this loan and security agreement, we issued a warrant to purchase 71,428 shares of Series E convertible preferred stock at $14.00 per share. The fair value of the warrant resulted in a debt discount that is being amortized to interest expense over the life of the agreement.

In June 2010, we amended the loan and security agreement discussed above. The restructured loan and security agreement has a maturity date of February 2013. The loan bears interest at 13.5% per annum with interest only payments due monthly through February 2011. Commencing in March 2011, we will begin making monthly payments of $0.6 million for principal and interest with an additional payment of $2.1 million due in March 2012. The agreement also requires payment of fees in March 2012 in the amount of $0.2 million. The combined additional payment and fees of $2.3 million are being accreted as interest expense through the maturity date of February 2013. We are subject to a prepayment fee in the amount of 1.0% of the outstanding principal amount being prepaid. In connection with the execution of this loan and security agreement, we issued to the lender a warrant to purchase 99,966 shares of Series E-1 convertible preferred stock at $7.00 per share. The fair value of the warrant resulted in a debt discount that is being amortized to interest expense over the life of the agreement. In addition, we amended warrants previously issued to this lender by reducing the exercise price of all of their warrants to $7.00 per share and extending the term of one warrant. As a result of the warrant amendments, these warrants were revalued resulting in an increase in the value of $0.1 million which resulted in an additional debt discount that will be amortized to interest expense over the life of the agreement.

As of September 30, 2010, the outstanding principal and accrued interest balance for this loan and security agreement was $14.6 million, net of unamortized debt discounts of $0.2 million.

The loan and security agreement contains customary covenants that, among other things, require us to deliver both annual audited and periodic unaudited financial statements by specified dates and maintain collateral on company premises and restrict our ability, without the consent of the lender, to incur additional debt, pay dividends or make certain other distributions, or payments in respect of our capital stock, engage in transactions with affiliates or engage in the sale, lease or license of our assets outside of the ordinary course of business. As of September 30, 2010, we were in compliance with the above covenants with the exception of the timely delivery of audited financial statements for 2009 for which we have received a waiver through December 31, 2010.

In August 2009, we entered into a convertible Note and Warrant Purchase Agreement, or Note, with existing investors to provide us with cash proceeds of $10.7 million. In connection with the Note, we issued warrants to purchase 380,906 shares of Series E convertible preferred stock at $14.00 per share. The fair value of the warrants resulted in a debt discount of $0.3 million. The Note was scheduled to mature on December 31, 2009, with interest accruing on the outstanding principal amount for the first 60 days at a rate equal to 1% per month and at a rate equal to 2% per month after the first 60 days, compounded monthly. In November 2009, the noteholders converted the outstanding principal amount and accrued interest totaling $11.0 million into 788,059 shares of Series E convertible preferred stock which were issued upon the conversion at a price of $14.00 per share.

In July 2010, we offered holders of preferred stock warrants with an exercise price over $7.00 per share the opportunity to amend those warrants to lower the exercise price to $7.00 per share. The amended warrants would be exercisable for Series E-1 convertible preferred stock and would receive one common share for each preferred share purchased, subject to the warrant holder’s agreement to immediately exercise the warrants in full and for

cash. The offer expired in August 2010 with warrants to purchase 99,864 shares of preferred stock exercised. As a result of this offer, we received gross proceeds of $0.7 million and issued 99,864 shares of both Series E-1 convertible preferred stock and common stock. The rights, preferences, and other terms of the Series E-1 convertible preferred stock were identical to those of our Series E convertible preferred stock, except the liquidation preference of the Series E-1 convertible preferred stock was $7.00 per share.

The following table presents our cash flow summary for each period presented (in thousands):

	Fiscal Year			Nine Months Ended September 30,	
	2007	2008	2009	2009	2010
Cash flow summary					
Net cash used in operating activities	$(21,759)	$(28,720)	$(19,513)	$(14,388)	$(9,247)
Net cash (used in) provided by investing activities	(6,740)	6,001	(688)	(610)	(999)
Net cash provided by financing activities	37,555	6,325	16,939	9,529	664
Net increase (decrease) in cash and cash equivalents	$ 9,059	$(16,281)	$ (3,194)	$ (5,421)	$(9,519)

Net Cash Used in Operating Activities

We derive cash flows from operations primarily from cash collected from the sale of our products, collaboration and license agreements and grants from certain government entities. Our cash flows from operating activities are also significantly influenced by our use of cash for operating expenses to support the growth of our business. We have historically experienced negative cash flows from operating activities as we have expanded our business and built our infrastructure domestically and internationally and this may continue in the future.

Net cash used in operating activities was $9.2 million during the nine months ended September 30, 2010. Net cash used in operating activities primarily consisted of our net loss of $13.8 million, changes in our operating assets and liabilities in the amount of $2.4 million, and non-cash income adjustment to the fair value of convertible preferred stock warrants of $0.2 million, which was partially offset by non-cash expense items such as stock-based compensation of $1.3 million, depreciation and amortization of our property and equipment of $0.9 million and amortization of debt discounts and issuance cost of $0.3 million.

Net cash used in operating activities was $14.4 million during the nine months ended September 30, 2009. Net cash used in operating activities primarily consisted of our net loss of $15.7 million, changes in our operating assets and liabilities in the amount of $1.2 million, and non-cash income adjustment to the fair value of convertible preferred stock warrants of $0.2 million, which was partially offset by non-cash expense items such as stock-based compensation of $1.2 million, depreciation and amortization of our property and equipment of $1.3 million and amortization of debt discounts and issuance cost of $0.2 million.

Net cash used in operating activities was $19.5 million during 2009. Net cash used in operating activities primarily consisted of our net loss of $19.1 million, changes in our operating assets and liabilities in the amount of $2.7 million, non-cash income from the licensing of technology of $1.8 million, and non-cash income adjustment to the fair value of convertible preferred stock warrants of $0.1 million, which was partially offset by non-cash expense items such as stock-based compensation of $2.1 million, depreciation and amortization of our property and equipment of $1.6 million and amortization of debt discounts and issuance cost of $0.3 million.

Net cash used in operating activities was $28.7 million during 2008. Net cash used in operating activities primarily consisted of a net loss of $29.5 million, non-cash expense adjustment to the fair value of convertible preferred stock warrants of $0.8 million, which was partially offset by changes in our operating assets and liabilities in the amount of $2.5 million and non-cash expense items such as stock-based compensation of $2.0 million, depreciation and amortization of our property and equipment of $1.5 million and amortization of debt discounts of $0.5 million.

Net cash used in operating activities was $21.8 million during 2007. Net cash used in operating activities primarily consisted of a net loss of $25.5 million, which was partially offset by non-cash expense items such as depreciation and amortization of our property and equipment of $1.6 million, stock-based compensation of $0.7 million, amortization of debt discounts of $0.5 million, and changes in our operating assets and liabilities in the amount of $0.4 million.

Net Cash (Used in) Provided by Investing Activities

Historically, our primary investing activities have consisted of capital expenditures for laboratory, manufacturing and computer equipment and software to support our expanding infrastructure and work force; restricted cash related to leased space and lending agreements; and purchases, sales and maturities of our available-for-sale securities. We expect to continue to expand our manufacturing capability, primarily in Singapore, and expect to incur additional costs for capital expenditures related to these efforts in future periods.

We used $1.0 million of cash in investing activities during the nine months ended September 30, 2010 for purchases of capital equipment to support our infrastructure and manufacturing operations of $1.1 million partially offset by the release of $0.1 million from restricted cash for a sub-lease that expired.

We used $0.6 million of cash in investing activities during the nine months ended September 30, 2009 for net purchases of capital equipment to support our infrastructure and manufacturing operations.

We used $0.7 million of cash in investing activities during 2009 for purchases of capital equipment to support our infrastructure and manufacturing operations of $0.8 million partially offset by proceeds of $0.1 million from disposals of property and equipment.

We generated $6.0 million of cash from investing activities during 2008 primarily from maturities of available for sale securities of $7.8 million, sales of available-for-sale securities of $3.0 million, restricted cash of $0.6 million, which was partially offset by purchases of available-for-sale securities of $4.5 million and capital expenditures of $0.9 million primarily to support our Singapore manufacturing facility.

We used $6.7 million of cash in investing activities during 2007, primarily for purchases of available-for-sale securities of $6.3 million and capital expenditures of $1.0 million primarily related to purchases of equipment for our Singapore manufacturing facility, partially offset by maturities of available-for-sale securities of $0.5 million.

Net Cash Provided by Financing Activities

Historically, we have principally funded our operations through issuances of convertible preferred stock and long term debt.

We generated $0.7 million of cash from financing activities during the nine months ended September 30, 2010 primarily from exercises of preferred warrants.

We generated $9.5 million of cash from financing activities during the nine months ended September 30, 2009 primarily from proceeds from our issuance of convertible promissory notes of $10.5 million partially offset by our repayment of debt of $1.0 million.

We generated $16.9 million of cash from financing activities during 2009 primarily from proceeds from the issuance of convertible promissory notes, net of issuance costs, of $10.5 million and proceeds from the issuance of convertible preferred stock, net of issuance costs, of $7.4 million, partially offset by the repayment of long-term debt of $1.0 million.

During 2008, we generated $6.3 million of cash from financing activities primarily due to proceeds from our amended loan and security agreement of $10.0 million, partially offset by repayments of our long-term debt of $3.9 million.

During 2007, we generated $37.6 million of cash from financing activities primarily due to net proceeds from issuance of preferred stock of $35.9 million and net proceeds from the issuance of convertible promissory notes of $5.0 million, partially offset by repayments on long-term debt of $3.5 million.

Capital Resources

We believe our existing cash and cash equivalents and the net proceeds from this offering, will be sufficient to meet our working capital and capital expenditure needs for at least the next 18 months. However, we may need to raise additional capital to expand the commercialization of our products, fund our operations and further our research and development activities. Our future funding requirements will depend on many factors, including market acceptance of our products, the cost of our research and development activities, the cost of filing and prosecuting patent applications, the cost of defending, in litigation or otherwise, any claims that we infringe third-party patents or violate other intellectual property rights, the cost and timing of regulatory clearances or approvals, if any, the cost and timing of establishing additional sales, marketing and distribution capabilities, the cost and timing of establishing additional technical support capabilities, the effect of competing technological and market developments and the extent to which we acquire or invest in businesses, products and technologies, although we currently have no commitments or agreements relating to any of these types of transactions. We currently expect to use the proceeds from this offering for sales and marketing initiatives, including significantly expanding our sales force, to support the ongoing commercialization of our products; for research and product development activities; for expansion of our facilities and manufacturing operations; and for working capital and other general corporate purposes. We may also use a portion of our net proceeds to acquire and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction.

Based on our cash and cash equivalents balances as of December 31, 2009, our projected spending in 2010 and without taking into account our receipt of the proceeds of this offering, our independent registered public accounting firm has included in their audit opinion for the year ended December 31, 2009 a statement with respect to our ability to continue as a going concern. However, our financial statements have been prepared assuming we will continue to operate as a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business.

We may require additional funds in the future and we may not be able to obtain such funds on acceptable terms, or at all. If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any debt or additional equity financing that we raise may contain terms that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us. If we are unable to raise adequate funds, we may have to liquidate some or all of our assets, or delay, reduce the scope of or eliminate some or all of our development programs. If we do not have, or are not able to obtain, sufficient funds, we may have to delay development or commercialization of our products or license to third parties the rights to commercialize products or technologies that we would otherwise seek to commercialize. We also may have to reduce marketing, customer support or other resources devoted to our products or cease operations.

Off-Balance Sheet Arrangements

Since our inception, we have not had any off-balance sheet arrangements as defined in Item 303(a)(4) of the Securities and Exchange Commission’s Regulation S-K.

Contractual Obligations and Commitments

The following summarizes our contractual obligations as of September 30, 2010 (in thousands):

	Payments Due by Period				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	Thereafter
Operating lease obligations	$ 4,118	$ 1,039	$ 2,587	$ 491	$ —
Long-term debt	17,692	5,020	12,672	—	—
Purchase obligations	2,809	2,809	—	—	—
Total	$24,619	$ 8,868	$15,259	$ 491	$ —

Our operating lease obligations relate to leases for our current headquarters and leases for office space for our foreign subsidiaries. Purchase obligations consist of contractual and legally binding commitments to purchase goods.

We have entered into several license and patent agreements. Under these agreements, we pay annual license maintenance fees, nonrefundable license issuance fees, and royalties as a percentage of net sales for the sale or sublicense of products using the licensed technology. If we elect to maintain these license agreements, we will pay aggregate annual fees of $0.3 million per year until 2027. Future payments related to these license agreements have not been included in the contractual obligations table above as the period of time over which the future license payments will be required to be made, and the amount of such payments are indeterminable.

On March 7, 2003 we entered into a Master Closing Agreement with Oculus Pharmaceuticals, Inc. and the UAB Research Foundation, or UAB, related to certain intellectual property and technology rights licensed by us from UAB. Pursuant to the agreement, we are obligated to issue UAB shares of our common stock with a value equal to $1.5 million upon the achievement of a certain milestone and based upon the fair market value of our common stock at the time the milestone is achieved. We currently do not anticipate achieving this milestone in the foreseeable future and do not anticipate issuing these shares.

Our manufacturing operations in Singapore, which commenced in October 2005, have generated incentive grant payments from EDB for our research, development and manufacturing activity in Singapore. To remain eligible for future incentive grant payments, we are required to maintain a significant and increasing manufacturing and research and development presence in Singapore. Under our current grant agreements with EDB, we expect our spending related to these grant agreements to increase in order to maintain our manufacturing facility in Singapore. Future expenditures related to these grant agreements have not been included in the contractual obligations table above as the amounts of future expenditures, if any, and the timing of when they will be incurred are still indeterminable.

In September 2010, we entered into a new lease for our headquarters in South San Francisco, California. The new lease expires in April 2015 and includes a renewal option for an additional three years. We received a $0.4 million lease incentive which will be recognized as a reduction of rent expense on a straight-line basis over the term of the new lease.

Recent Accounting Pronouncements

Information with respect to recent accounting pronouncements is included in Note 1 of the notes to our consolidated financial statements included elsewhere in this prospectus.

Quantitative and Qualitative Disclosures about Market Risk

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of fluctuations in foreign currency exchange rates and interest rates. We do not hold or issue financial instruments for trading purposes.

Foreign Currency Exchange Risk

As we expand internationally our results of operations and cash flows will become increasingly subject to fluctuations due to changes in foreign currency exchange rates. Our revenue is generally denominated in the local currency of the contracting party. Historically, the substantial majority of our revenue has been denominated in U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States, with a portion of expenses incurred in Singapore where our other manufacturing facility is located. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates. Fluctuations in currency exchange rates could harm our business in the future. The effect of a 10% adverse change in exchange rates on foreign denominated cash, receivables and payables as of December 31, 2009 and September 30, 2010 would not have been material. To date, we have not entered into any material foreign currency hedging contracts although we may do so in the future.

Interest Rate Sensitivity

We had cash and cash equivalents of $5.1 million as September 30, 2010. These amounts were held primarily in cash on deposit with banks, money market funds, commercial paper, corporate notes or notes from government-sponsored agencies, which are short-term. Cash and cash equivalents are held for working capital purposes and restricted cash amounts are held as letters of credit for collateral for a security agreement with a lender and for our facility lease agreements. Due to the short-term nature of these investments, we believe that we do not have any material exposure to changes in the fair value of our investment portfolio as a result of changes in interest rates. Declines in interest rates, however, will reduce future investment income. If overall interest rates had decreased by 10% during the periods presented, our interest income would not have been materially affected.

As of September 30, 2010, the principal amount of our long-term debt outstanding was $14.6 million and the principal and accrued interest amount of our convertible promissory notes outstanding was $0.2 million. The interest rates on our long-term debt and convertible promissory notes are fixed. If overall interest rates had increased by 10% during the periods presented, our interest expense would not have been materially affected.

Fair Value of Financial Instruments

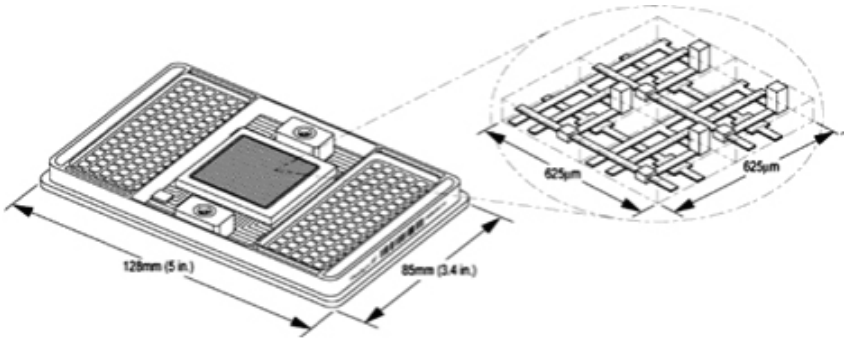
We do not have material exposure to market risk with respect to investments as our investments consist primarily of highly liquid securities that approximate their fair values due to their short period of time to maturity. We do not use derivative financial instruments for speculative or trading purposes, however, we may adopt specific hedging strategies in the future.

BUSINESS

Overview

We develop, manufacture and market microfluidic systems for growth markets in the life science and agricultural biotechnology, or Ag-Bio, industries. Our proprietary microfluidic systems consist of instruments and consumables, including chips and reagents. These systems are designed to significantly simplify experimental workflow, increase throughput and reduce costs, while providing the excellent data quality demanded by customers. In addition, our proprietary technology enables genetic analysis that in many instances was previously impractical. We actively market three microfluidic systems including eight different commercial chips to leading pharmaceutical and biotechnology companies, academic institutions, diagnostic laboratories and Ag-Bio companies. We have sold systems to over 200 customers in over 20 countries worldwide.

To achieve and exploit advances in life science research, Ag-Bio and molecular diagnostics, laboratories need robust systems that deliver increased throughput and simpler workflows at decreased costs. Our microfluidic systems are designed to overcome many of the limitations of conventional laboratory systems by integrating an increasing number of fluidic components on a single microfabricated chip. Our technology enables our customers to perform and measure thousands of sophisticated biochemical reactions on samples smaller than the content of a single cell, while utilizing minute volumes of reagents and samples. Similarly, for next generation DNA sequencing, our systems enable rapid preparation of multiple samples in parallel at low cost.



Schematic of our 96.96 Dynamic Array chip including an enlarged section showing four of the chip's 9,216 test chambers.

We have successfully commercialized our BioMark and EP1 systems for genetic analysis and our Access Array system for next generation DNA sequencing sample preparation. We have grown our revenues from $6.4 million in 2006, to $25.4 million in 2009 and $23.2 million in the nine months ended September 30, 2010, during which time our product margin has increased from 30% in 2006, to 51% in 2009 and to 62% for the nine months ended September 30, 2010. Researchers and clinicians have successfully employed our products to help achieve breakthroughs in a variety of fields, including genetic variation, cellular function and structural biology. These include using our microfluidic systems to help detect life-threatening mutations in patients' cancer cells, discover cancer associated biomarkers, analyze the genetic composition of individual stem cells, identify fetal chromosomal abnormalities and assess the quality of agricultural seed products. We believe, our Access Array system resolves a critical workflow bottleneck that exists in all commercial next generation DNA sequencing platforms. We expect that the versatility of our microfluidic technology will enable us to develop additional applications across a wide variety of markets.

Our Target Markets

The current markets for our products include life science research and Ag-Bio. Total expenditures in life science research and Ag-Bio in the markets described below are projected to exceed $4.3 billion by 2015. In addition, we are developing products for use in molecular diagnostics and other markets.

Life Science Research

Our primary area of focus within life science research is genetic analysis, the study of genes and their functions. The sum total of the hereditary material of an organism is known as its genome, which is commonly organized into functional units known as genes. Analysis of variations in genomes, genes and gene activity in and between organisms can provide tremendous insight into their health and functioning. There are several forms of genetic analysis in use today including gene expression analysis, genotyping, digital PCR and DNA sequencing.

Gene expression and genotyping are studied through a combination of various technology platforms that characterize gene function and genetic variation. These platforms rely on polymerase chain reaction, or PCR, amplification to generate exponential copies of a DNA sample to provide sufficient signal to facilitate detection. Real-time quantitative PCR, or real-time qPCR, is a more advanced form of PCR that makes it possible to identify the number of copies of DNA present in a sample. Real-time qPCR often utilizes TaqMan, which is a proprietary chemistry developed by Roche Molecular Systems Inc.

The scale of genetic research varies widely. At the low end, researchers sometimes examine a limited number of genetic variations in a relatively small population. At the upper end, researchers may perform genome wide association studies where hundreds of thousands of possible genetic variations are examined across thousands or tens of thousands of samples. Because of the inherent complexity of biological systems, it is rare for researchers to be able to discover scientifically relevant information by examining just a few genetic variations. On the other hand, the result of many genome wide association studies is simply the identification of a more limited set of genetic variations that need to be examined in a larger population. As a result, some of the most productive life science research is done at a mid-multiplex scale, where tens or hundreds of genetic variations are examined in hundreds or thousands of samples.

We target the following specific areas of life science research, and our products are used for mid-multiplex research or applications of a similar scale:

Gene Expression Analysis. This form of genetic analysis focuses on measuring gene expression. The genome is typically made up of DNA, except in some viruses which utilize RNA. Typically, the process of gene expression involves the generation of RNA copies of specific regions of the genome by a process known as transcription. Such RNA copies are known as messenger RNAs. This messenger RNA may then be translated by the cell into a protein which may affect the activity of the cell or the larger organism. One prevalent form of gene expression analysis measures the levels of messenger RNA in a cell, in order to determine how the activity of particular genes or sets of genes affect the cell or the organism. According to a Kalorama Information report, the gene expression profiling market globally was approximately $1.1 billion in 2006 and is expected to grow to over $2.4 billion by 2012, representing a compounded annual growth rate of 14%.

Genotyping. Genotyping involves the analysis of variations across individual genomes. A common application of genotyping focuses on analyzing variations of single nucleotides, known as a single nucleotide polymorphism, or SNP. In SNP genotyping studies, statistical analyses are performed to determine whether a SNP or group of SNPs are associated with a particular characteristic, such as propensity for a disease. Haplotyping is an application of genotyping in which SNPs located at different loci on the same chromosome are studied simultaneously. According to a Kalorama Information report, the SNP genotyping market globally was approximately $735 million in 2008 and is expected to grow to $1.3 billion in 2014, representing a compounded annual growth rate of 10%.

Digital PCR. Digital PCR allows researchers to detect nucleic acid sequences that are present in sample concentrations that are too small to be accurately measured by conventional methods. Digital PCR typically relies on standard PCR techniques, but increases their sensitivity by dividing a sample into hundreds or thousands of smaller samples and performing a PCR assay on each such sample. The ability to count the presence or absence of amplification in this assay format allows for absolute quantitative measurement capabilities. As a result, digital PCR can perform much more precise detection of rare mutations, popularly known as

needle-in-a-haystack detection, gene expression or copy number measurements as compared to real-time qPCR. Digital PCR has the potential to enable early detection of diseases and other conditions, thereby improving prospects for effective treatment.

Single Cell Analysis. Single cell analysis is an emerging area of genetic research that requires specialized tools and techniques. Genetic research typically involves the analysis of samples containing thousands of cells and many different cell types. When such samples are studied using gene expression analysis, the results obtained reflect a rough average of the activity of all of the cells in the sample. Recently, researchers have demonstrated that this approach often masks critical differences in gene expression levels between different cell types and even between individual cells of the same type. In addition, in the fields of in-vitro fertilization and stem cell research, researchers are often required to examine single cells because the number of cells available for analysis is inherently limited. The scope of this research has often been constrained because the small amount of genetic material in a single cell prevents conventional methods from analyzing the activity of more than a few genes. In addition, large numbers of samples are required to determine the heterogeneous signatures of sub-populations of cells and large studies like these can be prohibitively expensive when performed on conventional platforms. According to a Select Biosciences report, the single cell analysis market globally was approximately $69 million in 2009 and expected to grow to $576 million in 2015, representing a compounded annual growth rate of 42%.

Sample Preparation for Next Generation DNA Sequencing. Through a process known as sequencing, researchers are able to determine the particular order of nucleotide bases that comprise all or a portion of a particular genome. In the last few years, researchers have begun to use next generation DNA sequencers to rapidly and cost-effectively sequence large portions of the genomes of many individuals and identify genetic variations that correlate with particular characteristics. Next generation DNA sequencing technologies have dramatically reduced the cost and processing time for genetic sequencing, but to be utilized effectively, require large numbers of unique samples. In addition, next generation DNA sequencing requires new sample preparation methodologies including adding identification tags to each segment of each individual sample that is to be sequenced. These sample preparation and tagging processes, known as target enrichment, are complex and require precise measurement and manipulation of minute quantities of DNA and reagents.

Agricultural Biotechnology

Genetic analysis techniques such as SNP genotyping have become increasingly useful in Ag-Bio applications such as wildlife population studies, agricultural quality control and commercial genetic engineering. These applications typically require the analysis of hundreds or thousands of SNPs to achieve representative samples and attain useful information. Due to these demands, commercially viable genetic analysis tools in Ag-Bio must be inexpensive, easy to use and able to provide extremely high throughput. Below a certain cost per data point, we believe Ag-Bio customers would choose to analyze the genome of each animal or sample. Based on the number of livestock slaughtered in the United States annually and our understanding of the price per data point required for broad adoption among Ag-Bio customers, we estimate the annual market opportunity to be greater than $400 million for livestock customers alone. We believe the market opportunity for genotyping in seeds may represent a similar market opportunity.

Molecular Diagnostics

Recent advances in genetic analysis technology are increasingly being used for clinical applications. Techniques such as SNP genotyping, gene expression analysis and other genetic correlation studies are used to identify disease susceptibility and to diagnose, classify and monitor disease progression. Molecular diagnostic tests based on measuring these genetic markers have the potential to be much more accurate and robust than conventional diagnostics. Within molecular diagnostics, an area of significant unmet clinical need is NIPD for fetal aneuploidies, since the most reliable diagnostic tests currently available are invasive and carry risks to the fetus. Current physician guidelines recommend that all pregnant woman receive aneuploidy screening in the first

trimester. Based on the number of births in the United States and the percentage of women that receive prenatal care, we believe that the potential market for an accurate non-invasive diagnostic test could be more than $1 billion annually in the United States alone. Markets in the European Union, India and China could represent significant additional demand. In collaboration with Novartis Vaccines & Diagnostics, Inc., or Novartis V&D, we are developing a microfluidic system to target this NIPD market for fetal aneuploidies.

The Limitations of Existing Laboratory Systems

Academic, clinical and industrial researchers are increasingly performing genetic analysis on large sample sizes and assay sets. These experiments are typically performed using systems consisting of 384 well or larger microplates, pipetting stations, robotic plate movers and other elements of laboratory equipment. However, these conventional systems require an extremely complex workflow involving thousands of pipetting steps, hundreds of microplates and, despite the use of robotics, extensive human intervention. Such complexity limits the throughput of laboratories and increases the possibility of errors and variability between experiments. In addition, these systems typically are unable to perform experiments with low fluid volumes, leading to excessive consumption of reagents and inconsistent results.

In response to the limitations of conventional systems, numerous other methods of genetic analysis, including microarrays, pre-formatted arrays, bead arrays, microdroplets and mass spectrometer analysis have been developed. However, each of these high-throughput methods has one or more limitations that reduce its utility particularly for mid-multiplex experimentation.

Microarrays, pre-formatted arrays and bead arrays all lack flexibility because researchers must specify the assays they wish to perform at the time the products are ordered. This in turn limits researchers' ability to refine their assay panel during the course of a study. In addition, if researchers wish to use assay panels other than a manufacturer's standard panels, it may take weeks for a customized product to be produced.

The quality of the data produced by microarrays, pre-formatted arrays and mass spectrometer analysis is insufficient for certain research activities. For genotyping studies, data quality is typically measured by call rate, which is the frequency of a reading with respect to a particular SNP. Both pre-formatted arrays and mass spectrometer analysis generally have call rates lower than real-time qPCR performed in microplates. For gene expression studies, it is often important to measure expression levels over a broad dynamic range to capture all or most of the variation found among subjects. Microarrays, pre-formatted arrays, bead arrays or mass spectrometer analysis cannot measure gene expression levels over as broad a dynamic range as real-time qPCR performed in microplates.

The workflow for bead arrays and mass spectrometer analysis is complex, time consuming and costly. For example, standard protocols often require multiple complex operations to be performed over several days by skilled technicians. Also, certain pre-formatted arrays require significant manual intervention, which significantly increases costs and potential for error.

These methods can also be very costly for mid-multiplex experimentation. For example, a single microarray or bead array is capable of analyzing thousands of genes from a single sample. These devices have been successfully used for surveying the genome to discover basic patterns of genetic variation. These surveys are commonly performed on tens or hundreds of samples and are intended to identify a subset of genes for further investigation. However, for validation studies, which typically require the analysis of thousands or tens of thousands of samples, the high per sample cost of microarrays and bead arrays often make them uneconomical. Similarly, the high initial setup costs for mass spectrometry analysis generally make it economically feasible only for very large-scale studies.

While the cost and processing time for genetic sequencing has plummeted with next generation DNA sequencing technologies, improvements in sample preparation has lagged to the extent that sample preparation

now represents the major bottleneck from both a cost and time perspective in the sequencing process. Microdroplet technologies have been proposed as a means to accelerate the sample preparation and tagging process for next generation DNA sequencing. However, this technique can process only one sample at a time, is expensive and cannot be validated prior to sequencing.

The limitations of existing technologies become even more acute when clinicians attempt to translate scientific research into commercial molecular diagnostics. Given the nature of their operations, commercial clinical laboratories need systems that can test large numbers of patient samples at low cost and with minimal labor requirements. Moreover, many of the most promising research studies rely on measuring each sample across tens or even hundreds of genetic markers to diagnose or classify a disease. We believe that using standard microplate technology to make multiple measurements on a large number of samples is often too complex and expensive for most clinical laboratories. Similarly, many of the limitations of microarrays, pre-formatted arrays, bead arrays and microdroplets also impact their ability to provide a broadly acceptable molecular diagnostic solution. As a result, the molecular diagnostic tests adopted by clinical laboratories have generally been relatively simple or have required specialized machines to perform. Diagnostic approaches that require measuring large numbers of genetic markers are generally not available or are available only from a diagnostic laboratory that specializes in the particular test.

Researchers, clinicians and commercial users need more robust systems that deliver increased throughput and simpler workflows with decreased costs.

The Fluidigm Solution

Our proprietary microfluidic systems are designed to significantly simplify experimental workflow, increase throughput, reduce costs, provide excellent data quality and in many instances enable genetic analysis that was previously impractical. Our microfluidic systems empower researchers and commercial customers to rapidly perform significantly more experiments or prepare significantly more samples—all at one time and in nanoliter volumes—with a combination of speed and accuracy that we believe cannot be achieved with other systems. Our systems deliver these advantages through the integration of sophisticated nanoliter fluid handling in an easy-to-use format that is compatible with most existing laboratory workflows and chemistries. Our systems are used in existing and emerging life science research and Ag-Bio markets, and we believe there are significant growth opportunities in additional markets.

We believe that our microfluidic systems have a number of compelling advantages over microplate systems and other mid-multiplex platforms including:

- *Data Quality*. Our microfluidic systems provide exceptionally high quality data. In genotyping, our systems achieve greater than 99% call rate and call accuracy. For gene expression, our systems achieve 6 orders of magnitude of dynamic range with inter- and intra-chip reproducibility at correlation coefficients greater than 0.99.
- *Improved Throughput*. Our base BioMark system can generate over 27,000 gene expression data points per day and our high throughput configurations of our systems can generate over 110,000 data points per day, with a time to first result measured in hours. Some competing systems may offer comparable data points per day, but may take up to a week for first results. Other systems offer comparable time to first result, but produce fewer data points per day, and often with lower data quality. Our improved throughput reduces the time and cost associated with complex experiments and expands the number and range of experiments that may be conducted.
- *Ease of Use*. Loading our 96.96 Dynamic Array chip requires 192 pipetting steps as compared to 18,432 steps required to load the number of 384 well microplates required for the same experiment. Difficulties encountered with some competing systems include manual sample loading and chip alignment that often results in lower throughput. We believe our microfluidic systems' efficient workflow reduces time, cost and potential for error.

- *Flexibility*. Our chips are built on input frames that are compatible with most commonly used laboratory systems, including existing robotic pipetting systems, bar code readers, plate handling systems and other equipment. Our chips are also designed to work with standard chemistries, including TaqMan and other reagents. In addition, our chips give researchers the flexibility to develop and load their own assays, unlike some competing products that can be used only to analyze specific genes or that are supplied pre-configured with fixed content.
- *Nanoliter Precision*. Our microfluidic systems allow users to dispense samples and reagents in microliter volumes which are automatically partitioned, combined or mixed in nanoliter and sub-nanoliter volumes. In addition to cost and workflow benefits, this capability makes it practical for users to conduct certain high sensitivity, low volume techniques, such as digital PCR and single cell analysis.
- *Cost Effectiveness*. We believe our high throughput systems offer a compelling cost benefit for high volume users. Our systems consume reagents in nanoliter volumes, have the ability to conduct thousands of parallel experiments on one chip, and offer customers the flexibility to use lower cost reagents as needed.

We provide complete microfluidic systems consisting of instruments and consumables, including chips and reagents. Our systems are easily incorporated into our customers' laboratory environments and analysis workflow. For example, our chips are the same size and shape as standard 384 well microplates and other chip consumables, which facilitate the loading and handling of our chips by standard laboratory equipment. Each of our chips includes an elastomeric, or rubber-like, core that contains an extensive network of microfluidic components that deliver samples and reagents to thousands of nanoliter volume chambers where individual assays are performed. Our primary product offerings are summarized in the table below:

Product	Product Description	Applications
Instruments		
BioMark System	Real-time PCR instrument, bundled analysis software and chip loading platforms	Digital PCR, SNP Genotyping, Gene Expression
EP1 System	Real-time PCR instrument, bundled analysis software and chip loading platforms	Digital PCR, SNP Genotyping
Access Array System	Sample preparation system that facilitates parallel amplification of 48 unique samples	Next Generation DNA Sequencing
Consumables		
Dynamic Array Chips	Microfluidic chip based on matrix architecture, allowing users to generate up to 9,216 real-time qPCR reactions simultaneously	Real-time qPCR, SNP Genotyping, Gene Expression
Digital Array Chips	Microfluidic chip based on partitioning architecture, allowing users to divide each of 48 separate samples into 770 smaller samples	Digital PCR, Gene Expression, Copy Number Variation, Mutation Detection
Access Array Chips	Microfluidic chip that facilitates parallel amplification, barcoding and tagging of 48 unique samples	Next Generation DNA Sequencing
Multi-use Chips	Reusable microfluidic chip that can be used up to five times and is able to produce up to 11,520 genotypes over its lifespan	SNP Genotyping

Current Commercial Applications

We believe our microfluidic systems offer distinct advantages in each of our target markets:

Life Science Research

Gene Expression and Genotyping. Our systems provide researchers a flexible and easy to use tool for generating high quality data. Competing technologies, such as pre-formatted arrays, bead arrays and microarrays,

are limited and inflexible because they require nucleic acid sequences on the device to be pre-specified when the chip or other consumable is manufactured. In contrast, our microfluidic systems allow researchers to utilize and easily tailor their assays to meet their experimental needs, which can shorten the analytical cycle for a given study to hours instead of weeks. We believe our systems also offer meaningful cost savings because they operate on nanoliter volumes of reagents and samples, which are between 0.5% and 1.0% of the amount required by conventional microplate systems.

For example, a consortium consisting of a major research university, a fertility clinic and a regenerative medicine and research group has utilized our systems to conduct research in in-vitro fertilization. By performing individual expression profile analyses, this group has discovered a set of factors implicated in the survival and maturation of human eggs, leading to improved success in fertility clinics.

Digital PCR. Our BioMark and EP1 systems can be used for digital PCR, a process in which samples are partitioned into minute reaction volumes containing individual DNA strands to enable digital counting for more accurate DNA quantification. Digital PCR has been used for a number of different applications, including absolute quantification, determination of genomic copy number variation and detection of rare mutations. Although several competitors are currently developing digital PCR systems, we were the first to introduce and successfully commercialize a digital PCR system in 2006. For example, pharmaceutical and biotechnology companies are taking advantage of the increased sensitivity enabled by our digital PCR technology to detect genetic mutations that are linked to drug efficacy and monitor cancer remission.

Single Cell Analysis. The integrated workflow and precision of our systems enable researchers to perform gene expression analysis on single cells on a scale that is impractical with conventional systems. Information gathered on cell activities has traditionally been obtained from populations of cells due to technological limitations on the ability to examine each individual cell. Our systems are able to precisely divide the limited amount of sample material extractable from a single cell into a multitude of divisions, and then accurately assay each such minute division. The high throughput of our systems allows researchers to analyze thousands of cells in this manner. For example, our base BioMark system can deliver over 27,000 single cell data points over 8 hours. Providing the combination of high throughput and data quality necessary for single cell analysis presents significant challenges that we believe most conventional systems are unable to address in a practical manner.

For example, our BioMark system has been used to help identify specific signatures of cancer stem cells, at the single cell level. Researchers believe that cancer stem cells are precursors to tumors and are often manifested well in advance of other tumor markers. By detecting and identifying such cells, researchers believe they can diagnose and treat cancer at a much earlier stage than with conventional methods. In addition, our BioMark system has been used to identify signatures of induced pluripotent stem, or iPS, cells. These iPS cells may have multiple applications in life science research and therapeutics. Similarly, our BioMark system has also been used to identify signatures of immune system cells, both pre- and post- exposure to antigens, to gain insight into improved vaccines and disease treatments.

Sample Preparation for Next Generation DNA Sequencing. To efficiently use next-generation sequencers to perform validation or other studies, researchers need to be able to prepare and tag samples from tens or hundreds of individuals prior to the samples being processed by the sequencers. Using conventional methods, this preparation and tagging must be done separately for each individual sample being processed, a laborious process that could take several days or more for a typical validation study. The streamlined workflow and flexibility of our systems allow samples from up to 48 individuals to be prepared and tagged in approximately three hours.

For example, a leading cancer research institute has utilized our Access Array system in conjunction with their next generation DNA sequencing platform to analyze key oncology genes across large cohorts of cancer samples. We believe such studies will advance the understanding of cancer etiology and potentially lead to the development of improved cancer treatments.

Agricultural Biotechnology

Ag-Bio customers require systems that can quickly and accurately analyze a large number of samples, such as tissue from livestock populations or seeds from a production lot, in a cost efficient manner. The streamlined workflow of our systems allows customers to genotype a set of samples in approximately three hours as opposed to a day or more, which is the time required to prepare and run a set of samples on bead array systems. In addition, the call rate for our systems is much higher than for pre-formatted arrays or mass spectrometry, and our products offer significant cost advantages over competing systems.

For example, our BioMark system is being used to help create disease resistant strains of staple food crops for developing nations. Recently, certain genetic indicators have been identified that quickly and accurately fingerprint crops. By systematically analyzing over 300 specific genetic markers, the BioMark system helped our customer produce and deliver seeds that will grow into plants more likely to survive, leading to improved yields. This success has led to increased adoption of the BioMark system, which is now used to selectively breed other desirable food qualities and drive agricultural efficiency and natural resource conservation.

Potential Future Applications

The inherent design flexibility of our core technology allows us to build microfluidic systems that can provide significant benefits in a wide range of fields and industries. We believe these features could lead to a number of different commercial applications including:

Molecular Diagnostics. Life science research is revealing additional diseases and conditions that can be diagnosed, evaluated and monitored by measuring panels of gene expression levels, SNPs, proteins or other biomarkers. Validating these research findings and translating them into clinically available tests often requires life science automation systems that are able to measure multiple biomarkers efficiently in a large number of patient samples. Our existing microfluidic systems are able to measure certain nucleic acid biomarkers that are commonly used in these tests, and in the future, we expect to develop additional systems to measure other relevant biomarkers.

We believe that the high-throughput, flexibility and simplified workflow of our microfluidic systems could make them an attractive solution for validating and commercializing a wide range of molecular diagnostic tests being developed by researchers. Our microfluidic systems have not been cleared or approved by the U.S. Food and Drug Administration, or FDA, for use in any molecular diagnostic tests and we cannot currently market them for the purpose of performing molecular diagnostic tests. We are currently developing a microfluidic system with Novartis V&D for NIPD for fetal aneuploidies. A commonly used diagnostic procedure for fetal aneuploidies is amniocentesis, which typically costs approximately $1,500 to $2,000 per test. Our system is in its early stages of development, and prior to commercialization, FDA clearance or approval may be required.

Other Applications. We believe that the inherent design flexibility of our core microfluidic technology allows us to perform sophisticated biochemical processes relevant to a wide range of fields and industries. We are developing our microfluidic technology for additional applications, including:

- *Single Cell Capture and Processing*. Researchers have increasingly focused on the study of single cells to better understand complex biological processes. We plan to apply our technology to make it easier to capture single cells and to increase the range of methods that can be used to interrogate a single cell.
- *Protein Assays*. While the analysis of mRNA and DNA gives insight into the activity of biological systems, most biological activity in cells is carried out by proteins. We have developed a chip that allows quantitation of 18 proteins within 48 samples simultaneously. We believe that the sensitivity and specificity of this chip will be highly valuable to the life science research industry. In addition, we have demonstrated PCR-based protein quantification using commercially available reagents on our BioMark system.

- *Cell Culture and Assays*. We are developing an integrated microfluidic chip that enables cell culture to be performed in a highly automated fashion in a microfluidic environment. Our co-founder, Dr. Stephen Quake, recently used a prototype of our cell culture microfluidic chip to perform single cell studies of cell signaling, and published these results in the journal *Nature*.
- *Sample Preparation for Next Generation DNA Sequencing*. In addition to the Access Array system, we have demonstrated a general architecture with the ability to use bead based purification steps in-chip, allowing sequential reactions with purification steps in between. While we have no immediate plans to commercialize this architecture, it may find utility in automated library prep for de novo next generation DNA sequencing.

Our microfluidic systems address the needs of researchers and clinicians who perform mid-multiplex experimentation in the areas of genetics, Ag-Bio and molecular diagnostics. In particular, for validation studies or projects of a similar scale, our microfluidic systems substantially reduce cost, simplify workflow and increase throughput as compared to conventional microplate systems. Nevertheless, researchers may be slow to adopt our microfluidic systems as they are based on technology that, compared to conventional technology, is new and less established in the industry. Moreover, many of the existing laboratories have already made substantial capital investments in their existing systems and may be hesitant to abandon that investment. While we believe our systems provide significant cost-savings, the initial price of our instruments and the price of our chips is higher than conventional systems and standard 384 well microplates. Our microfluidic systems are less well suited for smaller scale research initiatives where complexity and workflow issues may be less pressing and conventional systems may be more economical. In addition, for very large-scale association or survey projects, researchers may choose to use microarrays because of the ability of those products to measure thousands of genetic markers with a single device. As life science research continues to evolve and is commercialized, we believe that there will be increasing demand for life science automation solutions that enable experimentation on the scale supported by our microfluidic systems.

Strategy

We intend to continue growing as a global leader in providing microfluidic systems to the life science research and Ag-Bio markets. Our business strategy includes of the following elements:

Increase Penetration of our Microfluidic Systems. Our sales and marketing efforts have established our systems as leading solutions for certain high-throughput life science research applications. A growing number of companies and leading researchers around the world have recognized the benefits of our technical platform and are becoming much more visible in their support and endorsement of our products and technologies to their professional colleagues. From our inception through October 2010, the results of experiments based upon our microfluidic systems have been published in 116 peer-reviewed articles, 66 of which have been published since the beginning of 2009. We intend to leverage the growing market awareness of our current product offerings with enhanced sales and marketing efforts that include adding sales representatives in new geographies, accessing sales and marketing efforts of large partners though co-marketing agreements, continuing to build relationships with thought leaders in our target markets and helping our current supporters to become more visible to potential new customers.

Increase Recurring Consumables Revenue through Instrument Sales and Product Innovation. We intend to drive consumables revenue growth by increasing the number of installed instruments, integrating other value added operations and sample handling abilities into our chip architecture, increasing customer usage by decreasing the cost-per-data point and developing systems for additional applications.

Provide Assays and Design Services that Leverage our System Strengths in Key Application Areas. We provide assay design services that enable the use of our Access Array system to prepare samples for next generation DNA sequencing. In addition, we provide assay content for specific application areas, including cancer research, organ rejection, stem cell gene expression and other areas with potential clinical utility. We plan

to expand these offerings to include chemistries for gene expression, particularly for single cell analysis and genotyping. We believe these chemistries will increase the flexibility of our chips as well as improve cost per-assay and performance in our microfluidic platform.

Provide Expanded Offerings that Complement and Support our Core Technology Offerings. We intend to expand our product offerings to address additional stages of our customers' workflow. We believe we can enhance the utility of our microfluidic system by providing additional workflow components to our customers, including systems to isolate, partition and amplify samples prior to analysis, and software and data analysis tools for downstream applications.

Leverage our Proprietary Technology to Address New Markets. We believe our technology is broadly applicable to biotechnology automation and could be further developed for a wide variety of additional applications, including protein expression analysis, new types of sample preparation cell culture and analysis and molecular diagnostics. Within molecular diagnostics, our initial area of focus is in NIPD for fetal aneuploidies, for which no approved non-invasive diagnostic currently exists.

Provide Superior Customer Service. We have a domestic and international direct sales force and support organization that offers technical solutions and customer support. Through direct relationships with our customers, we believe we are able to better understand their needs and apprise them of new product offerings and technological advances in our current systems, related instrumentation and software, while maintaining a consistent marketing message and high level of customer service. A key component of our value proposition is having capable, specialized, technical staff available to ensure that our customers are not only using our tools in an optimized fashion, but also designing experiments and choosing methodologies that will result in an optimized protocol in terms of both time and expense. We intend to expand the staff dedicated to customer service and support in important commercial geographies and in our headquarters.

Enhance Chip Manufacturing Efficiency. We intend to enhance our manufacturing efficiency through improvements in our existing processes, development of new chip designs and implementation of new manufacturing methods in order to improve our manufacturing yields and reduce our manufacturing costs. We believe that these improvements will enable us to deliver additional value to our customers and maintain or enhance our advantages over competing systems.

Continue to Develop our Technology and Intellectual Property Position. Our products are based on a set of related proprietary technologies that we have either developed internally or licensed from third parties. We intend to continue making significant investments in research and development to further expand and deepen our technological base. At the same time, we intend to maintain and strengthen our intellectual property position through the continued filing and prosecution of patents in the United States and internationally and through the in-licensing of third party intellectual property as appropriate.

Products

We actively sell three microfluidic systems, BioMark, EP1 and Access Array. These systems are based on one or more chips designed for particular applications and include specialized instrumentation and software. All of our systems include chip controllers that control the activation of valves, loading of reagents, and recovery or wash steps within the chips. Each chip controller comes with software to control chip and instrument operations for particular applications. The BioMark system includes a real-time PCR machine that comprises a thermal cycler for PCR and a fluorescence reader that can detect the results of reactions over time. The EP1 system includes stand-alone thermal cyclers and an end-point fluorescence reader. The EP1 thermal cycler supports fast PCR enabling the performance of high-throughput SNP genotyping. The BioMark and EP1 systems both include software to analyze, annotate and archive the data produced by the reader. The Access Array system includes a stand-alone thermal cycler and two chip controllers. We provide an extensive set of protocols and application notes with all of our systems to support specific scientific applications. All of our systems are designed to be compatible with standard laboratory automation equipment.

The BioMark System for Genetic Analysis

Our BioMark system performs high-throughput gene expression analysis, SNP genotyping, single cell analysis and digital PCR using TaqMan, EvaGreen dye and other chemistries.

Fluidigm Dynamic Array Chips. Our Fluidigm 96.96 Dynamic Array chip is based on a matrix architecture and is capable of individually assaying 96 samples against 96 reagents, generating 9,216 reactions on a single chip. Our Fluidigm 48.48 Dynamic Array chip is based on the same architecture and is capable of individually assaying 48 samples against 48 reagents, generating 2,304 reactions. One version of each chip is optimized to perform gene expression analysis and another is optimized for genotyping. All assays are performed in volumes of 10 nanoliters or less. In 2010, we introduced the reusable FR 48.48 Dynamic Array chip. This chip is based upon the same matrix architecture as our standard 48.48 Dynamic Array chip, but can be cleaned by the customer and used up to 5 times.

Fluidigm Digital Array Chips. Our Fluidigm 48.770 Digital Array chip is based on partitioning architecture that divides each of up to 48 separate samples into 770 microscopic samples and then performs a PCR or other assay for each divided sample in 1 nanoliter or smaller volume. Our 12.765 Digital Array chip is based on the same architecture and divides up to 12 samples into 765 parts. These chips can be used for digital PCR applications such as rare mutation detection or copy number variation analysis.

BioMark Instrumentation and Software. Our chip controllers for the BioMark system fully automate the setup of Dynamic Array and Digital Array chips for real-time qPCR-based experiments and include software for implementing and tracking experiments. Our BioMark reader controls the PCR process and detects the fluorescent signals generated using a white light source, emission and excitation filters, precision lenses, a thermal cycler and a digital camera. We also offer various software packages that provide data analysis following data collection. Our analysis software shows data as a color-coded map of every position on the chip, such as for amplification curves and as numeric tabular data.

The EP1 System

The EP1 system performs SNP genotyping and end-point digital PCR using TaqMan, EvaGreen dye and other chemistries. Our EP1 System uses the same Dynamic Array and Digital Array chips that are used by our BioMark system. Because of its high throughput and focus on genotyping, the EP1 system is a preferred choice by our Ag-Bio customers for field implementation. In addition, we believe our reusable FR48.48 Dynamic Array chip and future reusable chips may be widely adopted by our Ag-Bio customers because they can substantially reduce the cost per data point for high volume users.

EP1 Instrumentation and Software. The chip controllers for the EP1 system fully automate the setup of chips for end-point SNP genotyping and digital PCR experiments, and include software for implementing and tracking experiments. Our EP1 reader detects fluorescent signals generated in our chips using a light source, emission and excitation filters, precision lenses and a digital camera. Our FC1 Cycler performs fast thermal cycling for chips and enables up to 12 Dynamic Array chips to be run per day. We also offer various software packages that provide data analysis following data collection. Our analysis software shows data as color-coded map of every position on the chip, cluster maps showing results for every assay, and as numeric tabular data.

The Access Array System

The Access Array system enables automated sample preparation and tagging, at a cost of $10 per sample or less, for all currently marketed next generation DNA sequencers. We believe the Access Array system is the only high throughput target enrichment system currently on the market that is capable of simultaneously processing multiple samples. The Access Array system can be used in conjunction with our BioMark system to provide real-time monitoring of amplification steps.

Fluidigm Access Array Chips. Our Fluidigm 48.48 Access Array chip is based on an architecture similar to that of the Dynamic Array chip, but is designed to enable recovery of reaction products from the chip. This chip combines up to 48 samples with 48 primer sets prior to PCR amplification. This is accomplished with only 96 pipetting steps as compared to approximately 7,000 pipetting steps that would be required by conventional systems. After amplification, all 48 PCR products for each sample are recovered in a pool. When PCR primers are designed to include DNA tags for specific sequencers and DNA barcodes for each sample, samples from the Access Array chip can be loaded directly into the sequencer. The DNA barcodes can then be used to identify products from each sample from the sequence data. In addition, we have shown that we have been able to combine up to 10 unique primer pairs per primer set, allowing up to 480 samples per chip, which can then be tagged for specific sequencers in a secondary step.

Access Array Instrumentation. The Access Array system is comprised of two chip controllers and a single stand-alone thermal cycler. This system can load Access Array chips, amplify and tag the regions of interest, and recover the sample for loading into a next generation DNA sequencer.

Access Array Barcode Libraries and Access Array Content Service. We provide optimized barcoding primers, or Access Array Barcode Libraries, for use with Roche and Illumina sequencing platforms. When used with the 48.48 Access Array chip, the barcode library enables the user to pool products of different samples, perform amplification of all samples in parallel, and then sequence the pooled samples as a single sample. We also offer the Access Array Content Service to provide validated custom primer sets for users.

The TOPAZ System for Protein Crystallization

The TOPAZ System allows users to screen protein samples against a set of reagents in order to determine the optimum conditions for crystallizing a protein. While we currently offer TOPAZ systems and chips for sale, we do not actively market this system.

Technology

Our products are based on a tiered set of related proprietary technologies that we have either developed internally or licensed from third parties.

Multi-Layer Soft Lithography

Our chips are manufactured using a technology known as multi-layer soft lithography, or MSL. Using MSL technology, we are able to create valves, chambers, channels and other fluidic components on our chips at high density. We combine these components in complex arrangements that allow nanoliter quantities of fluids or drops to be precisely manipulated within the chip. Unlike most prior microfluidic technologies, our chips do not rely on electricity, magnetism or similar approaches to control fluid movement. Rather, they control fluid flow with valves. The most important components on our chips are our NanoFlex valves, which are created by the intersection of two channels on adjacent layers. When the valve is open, fluid is able to flow through the lower or "flow" channel. When the upper or "control" channel is pressurized, the material separating the two
channels is deflected into the lower channel, closing the valve and stopping fluid flow. If pressure is removed from the control channel, the channels return to their original form, and the valve is again open. The elastomeric properties of microfluidic chip cores allow our NanoFlex valves to form a reliable seal and cycle through millions of openings and closings.

The elastomer we currently use for our commercial products is a form of silicone rubber known as polydimethylsiloxane, or PDMS, but we have researched other materials with different properties for specific purposes. PDMS is transparent, which allows the fluids and their contents to be easily monitored with a variety of existing optical technologies, such as bright field, phase contrast or fluorescence microscopy. The gas permeability of PDMS allows the reliable metering of fluids with near picoliter precision by eliminating the

bubble problems encountered by most other microfluidic technologies: in essence, we are able to pump fluids into closed reaction chambers at sufficient pressure to drive any air out of the chamber directly through the chamber walls. This gas permeability also supports maintenance of cells in cell culture conditions. PDMS offers a favorable environment for many biochemical reactions, including PCR and cell culture.

We have developed commercial manufacturing processes to fabricate valves, channels, vias and chambers with dimensions in the 10 to 100 micron range, at high density and with high yields. For research purposes, we have created devices with both substantially smaller and larger features. Though our manufacturing is based on standard semiconductor manufacturing technologies and techniques, we have also developed novel processes for mold fabrication that enable mass production of high density chips with nanoliter volume features. These processes are sufficiently robust that new microfluidic designs can often be built using existing fabrication techniques, allowing for rapid innovation of new chip designs without needing manufacturing process or equipment changes.

Microfluidic Chips

Our chips incorporate several different types of technology that together enable us to use MSL to rapidly design and deploy new microfluidic applications.

Microfluidic Components. The first level of our chip technology is a library of components that perform basic microfluidic functions. We have proven designs for numerous elements, such as pumps, mixers, separation columns, control logic and reaction chambers. These are readily integrated to create circuits capable of performing a wide range of biochemical reactions. Even when it is necessary to integrate multiple elements to perform a particularly complex reaction, the area taken up on a circuit for a single reaction is small compared to our typical overall chip core size of three centimeters by three centimeters. As a result, we are routinely able to develop chips that perform thousands of reactions per square centimeter.

Architectures. The second level of our chip technology comprises the architectures we have designed to exploit our ability to conduct thousands of reactions on a single chip. The first of these is the Dynamic Array, a matrix architecture that allows multiple different samples and multiple different reagents to be loaded onto a single chip and then combined so that there is an isolated reaction between each sample and each reagent. The primary advantage of this architecture is that each sample and reagent is only handled by a pipette once per chip rather than once per reaction, as is the case with conventional microplate-based technologies. For example, a single 96.96 Dynamic Array chip can perform a total of 9,216 unique reactions between 96 samples and 96 reagents with only 192 pipetting steps. With conventional microplate-based technologies, the same experiment would require about 18,432 pipetting steps and at least 24 conventional microplates. Our Sample Processor architecture allows us to bring similar benefits to reactions which require export of the reaction product and more complex (multi-step) reactions. For example, our Access Array chip automates sample preparation for targeted resequencing by amplifying 48 genetic regions on each of 48 samples and exporting each prepared sample. Our Digital Array architecture allows a sample to be split into hundreds to tens of thousands of smaller samples. Separate reactions can then be conducted on each of the smaller samples. The cell processor automates cell seeding, culture, combinatorial dosing with multiple reagents, and export for further analysis.

Interface and Handling Frames. The third level of our chip technology involves the interaction of our chips with the actual laboratory environment. The core elastomeric block at the center of our chip is surrounded by specially designed frames that are able to deliver samples and reagents to the blocks. These frames are the same size as standard 384 well microplates and have sample and reagent input ports laid out in a standard 384 well microplate format. As a result, our chips can be loaded with standard laboratory pipetting robots and can be used with standard plate handling equipment. These frames also transmit the pressure and control signals from our instruments to the chip.

Technological Advances. In the second quarter of 2002, we sold the first prototype of our 1.48 chip for our Topaz system, which featured 22 valves capable of 2.5 assays per square centimeter. Today we sell 48.770 Digital Array chips, with over 4,000 valves capable of more than 4,000 assays per square centimeter, a 181-fold increase in valve density and a 1,600-fold increase in assay capability. In our research and development laboratory, we have built and tested fully functional Digital Array chips capable of performing substantially more assays.

We have added capabilities to our chips in addition to increasing the density. In 2010, we employed our sample processor architecture to create the FR48.48 reusable Dynamic Array chips. With cleaning, each chip may be used five times, reducing the cost of each assay.

We also recently developed a second generation interface technology, which increases our number of chip control signals, or states, by nearly a factor of 10 (from 4 to 36). Since the number of chip states is approximately 2 raised to the power of the number of control signals, this represents a billion-fold increase in the number of states a chip may be set to; this advance means that the complexity of reactions that our chips may run is no longer meaningfully limited by the number of control lines. We expect to implement this architecture on commercial products in 2011.

Software and Instrumentation

We have developed instrumentation technology to load samples and reagents onto our chips and to control and monitor reactions within our chips. Our line of chip controllers consists of commercial pneumatic components and both custom and commercial electronics. They apply precise control of multiple pressures to move fluid and control valve states in an microfluidic chip. Our BioMark system consists of a custom thermal cycler packaged with a sophisticated fluorescence imaging system. Our FC1 cycler is a custom thermal cycler capable of very rapid cycling: 40 cycles in 30 minutes. Our EP-1 instrument is a fluorescence reader designed for endpoint imaging, suitable for digital PCR and genotyping applications. All of these instruments are designed to be easily introduced into standard automated lab environments.

We have developed specialized software packages to manage and analyze the unusually large amounts of data produced by our systems. Our BioMark system's gene expression analysis software automatically measures individual real-time qPCR reactions from fluorescent images and generates amplification threshold crossing values allowing researchers to readily perform complete normalized comparative gene expression analysis across large numbers of samples and assays. Similarly, our SNP Genotyping Analysis software automatically clusters fluorescent intensities from individual genotype reactions and makes genotype calls across individual and multiple chip runs. The Digital PCR Analysis software automatically calculates absolute copy number and copy number ratios from digital PCR experiments. Our Melting Curve Analysis software supports genotyping from data collected on the BioMark reader.

Protocols and Assays Design

We provide protocols to guide our customers in the use our products with commonly available molecular biology reagents for the analysis of their specific samples types. The set of protocols we offer are regularly expanded. For gene expression, we initially provided a protocol for TaqMan real-time reagents for general gene expression analysis. We now offer a protocol specifically for single cell analysis. We have also expanded the choices of reagents for our customers. In early 2010 we released a protocol for EvaGreen, a DNA binding dye for gene expression measurements with excellent data quality and a very low cost per assay. We also released protocols for the use of our microfluidic systems with Qiagen GmbH gene expression panels and Thermo-Fisher Solaris assays. For genotyping, we developed a protocol for using KASPar assays in the BioMark system.

PCR assay reagents need to be specific to the gene targets of interest. Since our systems analyze many gene targets at once, the process of designing a set of assays may delay the implementation experiments or require the

use of expensive pre-designed assays. To address this issue we have developed a computational method for rapid-turn PCR assay design. This process allows us to provide customers with validated assays for their targets of interest. We have commercialized this service for our Access Array customers and are developing the service for other applications.

In 2011, we plan on releasing assay design and custom content delivery systems for gene expression and genotyping that will allow customers to specify genes or SNP sites of interest and match them to region-specific primers, enabling our existing systems to amplify specific genetic regions of interest. We believe these assay design and content delivery systems will represent an improvement over conventional pre-defined panels by allowing customization based on cellular pathways or biological areas of interest.

In 2011, we plan on releasing gene expression and genotyping chemistries together with assay design services and pre-defined content. We expect these offerings will provide low-cost alternatives to chemistries such as Taqman and allow customers to use chips in more flexible ways. By specifying genes or SNP sites of interest and matching them to region specific primers, customers using our existing systems will be able to amplify specific genetic regions of interest at reduced cost without sacrificing data quality. In addition, these chemistries allow for more flexible formatting of samples and assays. For example, rather than using our 96.96 Dynamic Array chip to test 96 samples versus 96 assays, these new chemistries will allow customers to assay 1,152 samples versus 8 assays or 24 samples versus 384 assays.

Sales and Marketing

We distribute our instruments and supplies via direct field sales and support organizations located in North America, Europe and Japan and through distributors or sales agents in parts of Europe, Latin America and the Asia-Pacific region outside of Japan. Our domestic and international sales force informs our current and potential customers of current product offerings, new product introductions, and technological advances in our microfluidic systems, workflows, and notable research being performed by our customers or ourselves. As our primary point of contact in the marketplace, our sales force focuses on delivering a consistent marketing message and high level of customer service, while also attempting to help us better understand our customer needs. As of September 30, 2010, we have 62 people employed in sales, sales support and marketing, including 33 sales representatives and technical pre-sales specialists located in the field. Over half of this staff is located in the United States and dedicated to North American customers. We intend to significantly expand our sales, support and marketing efforts in the future.

Our sales and marketing efforts are targeted at laboratory directors and principal investigators at leading companies and institutions who need reliable life science automation solutions for their business or commercial purposes. We seek to increase awareness of our products among our target customers through regular contact, participation in tradeshows, on customer site seminars, academic conferences and dedicated company gatherings attended by prominent users and prospective customers from various institutions.

Our systems are relatively new to the market place and require a capital investment. As a result our sales process often involves numerous interactions and demonstrations with multiple people within an organization. Some potential customers conduct in-depth evaluations of the system including running experiments on our system and competing systems. In addition, in most countries, sales to academic or governmental institutions require participation in a tender process involving preparation of extensive documentation and a lengthy review process. As a result of these factors and the budget cycles of our customers, our sales cycle, the time from initial contact with a customer to our receipt of a purchase order, can often be 12 months or longer.

Commercial Alliances

Co-Marketing Agreements for Next Generation Sequencing

We have entered into an agreement to co-market our Access Array system with 454 Life Sciences, a division of F. Hoffman-La Roche Ltd., a manufacturer of leading next generation DNA sequencing platforms. Per our agreement, we bundle our Access Array sample preparation system with our co-marketer's next generation DNA sequencing technologies. This agreement enables us to disseminate the benefits of using the products in combination, engage in co-operative marketing and messaging, including select dual presence at trade shows and technical seminars, perform selective specialization or utilization of each respective company's channel for promotional or sales activity and educate the direct and indirect distribution channels of both companies. The agreement does not preclude us from engaging in other activities of similar or related interest with other participants in the sequencing technology market and may be terminated by either party with notice. We have entered into a similar co-marketing agreement with another manufacturer of next generation DNA sequencing platforms.

Non-invasive Prenatal Diagnostics Collaboration

We entered into a set of related agreements with Novartis V&D, in May 2010. Under these agreements, our capabilities in digital PCR are being developed for potential in-vitro diagnostics applications, with an initial focus on the development of an NIPD test for fetal aneuploidies. These agreements provide Novartis V&D with an option to exclusively license our technology in the primary field of non-invasive testing for fetal aneuploidies and the secondary field of non-invasive testing of genetic abnormality, disease or condition in a fetus or in a pregnant woman (other than as tested in the primary field), RhD genotyping or carrier status in a pregnant woman and the genetic carrier status of a prospective mother and her male partner. Under these agreements, except with Novartis V&D, we cannot, directly or in collaboration with a third party, use, develop or sell any products or services in the primary field or the secondary field, other than for research applications in the secondary field. The agreements contain technical feasibility milestones in 2010 and 2011 and may be terminated by Novartis V&D at any time. At Novartis V&D's option, these agreements can be extended to encompass further research, development and commercialization of our products, which could take several years or more to complete. The agreements provide that if a test is commercialized, we would supply the required systems and chips for performance of such test.

Customers

We have sold our BioMark, EP1 and Access Array systems to leading pharmaceutical and biotechnology companies, academic institutions, diagnostic laboratories and Ag-Bio companies. As of September 30, 2010, we have sold over 200 of these systems to customers in over 20 countries. The following is a representative list of our largest end-use customers by number of installed Biomark and EP1 systems in each of our current target markets:

Customer	Market	Application
National Cancer Institute / National Institute of Allergy and Infectious Diseases	Life Science Research	Genotyping Gene Expression Analysis Single Cell Analysis Next Generation Sequencing Digital PCR
Stanford University	Life Science Research	Gene Expression Analysis Single Cell Analysis Digital PCR Next Generation Sequencing
MedImmune, LLC	Life Science Research	Gene Expression Analysis
Tokyo University	Life Science Research	Single Cell Analysis Digital PCR
Genentech, Inc.	Life Science Research	Gene Expression Digital PCR
Novartis	Life Science Research	Digital PCR Gene Expression
Bayer CropScience AG	Ag-Bio	Genotyping
Alaska Department of Fish and Game	Ag-Bio	Genotyping

Manufacturing

Our manufacturing operations are located in Singapore and fabricate all of our microfluidic systems and instrumentation for commercial sale, as well as for internal research and development purposes. Our Singapore facility commenced operations in October 2005 and established full process capability for the Topaz chip in June 2006 and for our first Dynamic Array chip, the 48.48 Dynamic Array chip in October 2006. During 2009, we moved all of our manufacturing for commercial products to Singapore.

We established our manufacturing facility in Singapore to take advantage of the skilled workforce, supplier and partner network, lower operating costs and government support available there. Our microfluidic system manufacturing process includes photolithography and fabrication technologies that are very similar to those used in the fabrication of semiconductor chips. As a result, we are able to hire from a pool of skilled manpower created by the existing semiconductor industry in Singapore. Similarly, the Singapore semiconductor industry has created a broad network of potential suppliers and partners for our manufacturing operations. We are able to locally source a large proportion of the raw materials required in our processes and have been able to collaborate with local engineering companies to develop enabling technologies chip fabrication.

Our manufacturing operations in Singapore have been supported by grants from the Singapore Economic Development Board, or EDB, which provides incentive grant payments for research, development and manufacturing activity in Singapore. Our arrangements with EDB require us to maintain a significant and increasing manufacturing and research and development presence in Singapore.

We expect that our existing manufacturing capacity for instrumentation and chips is sufficient to meet our needs at least through mid-2012. However, we are considering developing additional capacity to ensure that all or most of our products are produced by at least two different facilities. We believe that having dual sources for our products would help mitigate the potential impact of a production disruption at any one of our facilities and that such redundancy may be required by our customers in the future. We have not determined the timing or location of any additional manufacturing capacity.

We rely on a limited number of suppliers for certain components and materials used in our systems. While we are in the process of qualifying additional sources of supply, we cannot predict how long that qualification process will last. If we were to lose one or more of our limited source suppliers, it would take significant time and effort to qualify alternative suppliers. Key components in our products that are supplied by sole or limited source suppliers include a specialized polymer from which our chip cores are fabricated and the specialized high resolution camera used in the reader for our BioMark system. We are in the midst of qualifying an alternate camera source, with the qualification scheduled to be completed in the first quarter. With respect to many of our suppliers, we are neither a major customer, nor do we have long term supply contracts. These suppliers may therefore give other customers' needs higher priority than ours, and we may not be able to obtain adequate supply in a timely manner or on commercially reasonable terms.

Research and Development

We have assembled experienced research and development teams at our South San Francisco and Singapore locations with the scientific, engineering, software and process talent that we believe is required to grow our business.

New Product and Application Development

The largest component of our current research and development effort is in the areas of new products and new applications.

We plan to focus on enhancing our single cell analysis, cell preparation and cell culturing capabilities, strengthening our current product lines by further developing content and our existing chip architectures, and developing products to support molecular diagnostic applications.

Single Cell Analysis. We intend to strengthen the single cell analysis capability of the BioMark system by expanding our customers' options for single cell procurement and downstream data analysis. For example, we are developing a system for single cell capture and preparation that will increase the types of samples that can be processed by the system as well as the types of usable preparation chemistry. We expect that this new system will be able to prepare samples both for BioMark system as well as for next generation sequencing.

Cell Culture System. We are developing system that will enable researchers to culture a large number of individual cells within separate chambers on a chip, control the conditions in which each cell is cultured, and then extract the cells for further analysis. With the support of a grant from the California Institute of Regenerative Medicine, we have developed a prototype system that demonstrates the technical feasibility of this application.

Assay Development. We plan to add both content and flexibility to our current product lines. For example, we plan to expand our Assay Design Service to support gene expression and genotyping applications. This expansion is intended to enable customers in those areas to reduce their assay costs without sacrificing data quality by purchasing assays directly from us. We also plan to introduce chemistries that will allow customers to use our chips in the manner that is most efficient for their particular projects. For example, rather than using our 96.96 Dynamic Array chip to test 96 samples versus 96 assays, these new chemistries will allow customers to assay 1,152 samples versus 8 assays or 24 samples versus 384 assays.

Existing Architectures. We intend to develop additional products to strengthen the capabilities of our existing Dynamic Array and Digital Array architectures. For example, our existing 48.770 Digital Array chip can perform 36,960 reactions. We have developed prototype chips based on the Digital Array architecture that can perform 200,000 or more reactions and believe, that with further development, these chips could have substantial utility for research and molecular diagnostic applications.

Process Development

The second component of our research and development effort is process development. We continuously develop new manufacturing processes and test methods to drive down manufacturing cost, increase manufacturing throughput, widen fabrication process capability, and support new microfluidic devices and designs. In 2009, we opened a prototype fabrication facility at our Singapore manufacturing to fabricate prototype chips and test new fabrication processes. We invest in manufacturing automation, process changes and design modifications which historically have significantly improved yields and lowered the manufacturing costs of our chips.

New Technology Development

We have background research and development efforts to increase the density of components on our microfluidic systems and to lower the materials cost of our current production methods. We are evaluating new materials that can increase the functionality of existing products and that would allow our microfluidic systems to be used for a wider variety of biological and chemical reactions. Over the longer term, we are seeking ways to transfer functionality from instrumentation to chips to support development of field-based and point-of-care applications.

Our research and development expenses were $14.4 million, $14.0 million, $12.3 million and $10.1 million in 2007, 2008, 2009 and the nine months ended September 30, 2010, respectively. As of September 30, 2010, 60 of our employees were engaged in research and development activities.

Scientific Advisory Board

We maintain a scientific advisory board, consisting of members with experience and expertise in the field of microfluidic systems and their application, who provide us with consulting services. The scientific advisory board generally does not meet as a group but instead, at our request, the individual members advise us on matters related to their areas of expertise. We have entered into agreements with each of our advisors, other than Dr. Stephen Quake, that require them spend between 6 and 12 days each year advising us and provide for stock option grants to the advisor. Dr. Quake serves as chair of the Scientific Advisory Board pursuant to a broader consulting agreement with us. As Chairman, Dr. Quake advises us on the composition of the advisory board and is involved in discussions with us more frequently than other advisory board members. When the advisory board meets, Dr. Quake is responsible for setting the agenda for the meetings and chairing such meetings. Our scientific advisory board consists of the following members:

Stephen Quake, Ph.D. is a co-founder of Fluidigm and the chair of our scientific advisory board. He is a co-chair of the bioengineering department at Stanford University and an investigator of the Howard Hughes Medical Institute. Dr. Quake received a B.S. in Physics and a M.S. in Mathematics from Stanford University and a Ph.D. in Physics from Oxford University. Dr. Quake has been a member of our scientific advisory board since June 1999.

Frances H. Arnold, Ph.D. is the Dick and Barbara Dickinson Professor of chemical engineering and biochemistry at the California Institute of Technology. She is a member of the National Academy of Engineering and a fellow at the American Institute for Medical and Biological Engineering. Dr. Arnold received a B.S. in Mechanical and Aerospace Engineering from Princeton University and a Ph.D. in Chemical Engineering from the University of California, Berkeley. Dr. Arnold has been a member of our scientific advisory board since August 1999.

James M. Berger, Ph.D. is a Professor of Biochemistry and Molecular Biology at the University of California, Berkeley and a member of the Physical Biosciences Division, Lawrence Berkeley National Laboratory. Dr. Berger received a B.S. in Biochemistry from the University of Utah and a Ph.D. in Biochemistry from Harvard University. Dr. Berger has been a member of our scientific advisory board since June 2002.

Carl Hansen, Ph.D. is an Assistant Professor in the Department of Physics and Astronomy at the University of British Columbia. Dr. Hansen received a Ph.D. and M.S. in Applied Physics from the California Institute of Technology and a B.S. in Engineering Physics/Electrical Engineering/Honors Math from the University of British Columbia. Dr. Hansen has been a member of our Scientific Advisory Board since May 2008.

Frank McCormick, Ph.D. is the David A. Wood Distinguished Professor of Tumor Biology and the E. Dixon Heise Distinguished Professor in Oncology at the University of California, San Francisco, or UCSF. He is also the director of UCSF's Comprehensive Cancer Center. He is a member of the Institute of Medicine and a fellow of The Royal Society. Dr. McCormick received a B.Sc. in Biochemistry from the University of Birmingham and a Ph.D. in Biochemistry from the University of Cambridge. Dr. McCormick has been a member of our scientific advisory board since November 2006.

Howard M. Shapiro, M.D. is a lecturer on Pathology at Harvard Medical School, a visiting scientist at the Rosenstiel Basic Medical Sciences Research Center at Brandeis University and a research associate in Medicine and Pathology at Beth Israel Hospital. Dr. Shapiro received a B.A. from Harvard College and an M.D. from New York University School of Medicine. Dr. Shapiro has been a member of our scientific advisory board since December 1999.

Richard N. Zare, Ph.D. is the Marguerite Blake Wilbur Professor of Natural Science and chair of the chemistry department at Stanford University. He is a member of the National Academy of Sciences, the American Academy of Arts and Sciences and the recipient of the National Medal of Science. Dr. Zare received a B.S. in Chemistry and Physics and a Ph.D. in Chemical Physics from Harvard University. Dr. Zare has been a member of our scientific advisory board since December 2000.

Competition

We compete with both established and development stage life science companies that design, manufacture and market instruments for gene expression analysis, genotyping, other nucleic acid detection and additional applications. For example, companies such as Affymetrix, Inc., Agilent Technologies, Inc., Caliper Life Sciences, Inc., Illumina, Inc., Life Technologies Corporation, Luminex Corporation, Roche Applied Science, NanoString Technologies, Inc., RainDance Technologies, Inc., Sequenom, Inc. and Wafergen Bio-Systems, Inc. have products for gene expression, genotyping, and/or sequencing that compete in certain segments of the market in which we sell our products. In addition, a number of other companies and academic groups are in the process of developing novel technologies for life science markets.

The life science automation industry is highly competitive and expected to grow more competitive with the increasing knowledge gained from ongoing research and development. Many of our competitors are either publicly traded or are divisions of publicly traded companies and enjoy several competitive advantages over us, including:

- significantly greater name recognition;
- greater financial and human resources;
- broader product lines and product packages;
- larger sales forces;
- larger and more geographically dispersed customer support organization;

- substantial intellectual property portfolios;
- larger and more established customer bases and relationships;
- greater resources dedicated to marketing efforts;
- better established and larger scale manufacturing capability; and
- greater resources and longer experience in research and development.

We believe that the principal competitive factors in our target markets include:

- cost of capital equipment and supplies;
- reputation among customers;
- innovation in product offerings;
- flexibility and ease of use;
- accuracy and reproducibility of results; and
- compatibility with existing laboratory processes, tools and methods.

To successfully compete with existing products and future technologies, we need to demonstrate to potential customers that the cost savings and performance of our technologies and products, as well as our customer support capabilities, are superior to those of our competitors. The regular introduction of new and innovative offerings is necessary to continue to differentiate our company from other, larger enterprises. Additionally, a well staffed commercial team “in the field” is required to successfully communicate the advantages of our products and overcome potential obstacles acceptance of our products. In addition ongoing collaborations and partnerships with key opinion leaders in the genetics fields are desirable to demonstrate both innovation and applicability of our products. These relationships create the need for retention of a large and talented specialized staff, and occasionally require the placement of products or supplies on a temporary basis at a customer facility to demonstrate applicability of our tool to a specific scientific application.

Intellectual Property Strategy and Position

Our core technology originated at the California Institute of Technology, or Caltech, in the laboratory of Professor Stephen Quake, who is a co-founder of Fluidigm. Dr. Quake, his students and their collaborators pioneered the application of multilayer soft lithography in the field of microfluidics. In particular, Dr. Quake’s laboratory developed technologies that enabled the production of specialized valves and pumps capable of controlling fluid flow at nanoliter volumes. In a series of transactions, we exclusively licensed from Caltech the relevant patent filings relating to these developments. We have also entered into additional exclusive and non-exclusive licenses for related technologies from various companies and academic institutions.

Our patent strategy is to seek broad patent protection on new developments in microfluidic technology and then later file patent applications covering new implementations of the technology and new microfluidic circuit architectures utilizing the technology. As these technologies are implemented and tested, we file new patent applications covering scientific methodology enabled by our technology. Additionally, where appropriate, we file new patent applications covering instrumentation and software that are used in conjunction with our microfluidic systems.

We have developed our own portfolio of issued patents and patent applications directed at commercial products and technologies in development. For example, in part because of our pioneering commercialization efforts in the field of digital PCR, we have 14 patents and patent applications pending relating to devices, techniques and applications for digital PC, including methodologies for copy number variation and noninvasive prenatal diagnostics. We have additional patents and patent filings cell culture and single-cell isolation and

analysis devices and associated methodologies, high density and reusable genotyping and gene expression chips and massive multiplexing techniques for samples and assays in these chips, sample processing and sample preparation chips and encoding technology for use with next-generation sequencers, and associated instrumentation and software for controlling and reading our chips and analyzing the data obtained from them.

As of November 30, 2010, we own or have licensed 114 issued U.S. patents and 80 issued international patents. There are 230 pending patent applications, including 104 in the United States, 113 international applications and 12 applications filed under the Patent Cooperation Treaty. The U.S. issued patents we have licensed from Caltech expire between 2017 and 2025; the U.S. issued patents we have licensed from other parties expire between 2012 and 2029.

The patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. Our patents may not enable us to obtain or keep any competitive advantage. Our pending U.S. and foreign patent applications may not issue as patents or may not issue in a form that will be advantageous to us. Any patents we have obtained or do obtain may be challenged by re-examination, opposition or other administrative proceeding, or may be challenged in litigation, and such challenges could result in a determination that the patent is invalid. In addition, competitors may be able to design alternative methods or devices that avoid infringement of our patents. To the extent our intellectual property protection offers inadequate protection, or is found to be invalid, we are exposed to a greater risk of direct competition. If our intellectual property does not provide adequate protection against our competitors' products, our competitive position could be adversely affected, as could our business. Both the patent application process and the process of managing patent disputes can be time consuming and expensive. Furthermore, the laws of some foreign countries may not protect our intellectual property rights to the same extent as do the laws of the United States.

In addition to pursuing patents on our technology, we have taken steps to protect our intellectual property and proprietary technology by entering into confidentiality agreements and intellectual property assignment agreements with our employees, consultants, corporate partners and, when needed, our advisors. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure. Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate.

Our commercial success may depend in part on our non-infringement of the patents or proprietary rights of third parties. Third parties have asserted and may assert in the future that we are employing their proprietary technology without authorization. Competitors may assert that our products infringe their intellectual property rights as part of a business strategy to impede our successful entry into those markets. In addition, our competitors and others may have patents or may in the future obtain patents and claim that use of our products infringes these patents. We could incur substantial costs and divert the attention of our management and technical personnel in defending against any of these claims. Parties making claims against us may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize and sell products, and could result in the award of substantial damages against us. In the event of a successful claim of infringement against us, we may be required to pay damages and obtain one or more licenses from third parties, or be prohibited from selling certain products. We may not be able to obtain these licenses at a reasonable cost, if at all.

Government Regulation

Pursuant to its authority under the Federal Food, Drug and Cosmetic Act, or FFDCA, FDA has jurisdiction over medical devices, which are defined to include, among other things, in vitro diagnostic products, or IVDs. Our products are currently labeled and sold for research purposes only, and we sell them to pharmaceutical and biotechnology companies, academic institutions and life sciences laboratories. Because our products are not intended for use in clinical practice in the diagnosis of disease or other conditions, they do not fit the definition of a medical device under the FFDCA and thus are not subject to regulation by the U.S. Food and Drug

Administration, or FDA, as medical devices. In particular, while FDA regulations require that research only products be labeled, “For Research Use Only. Not for use in diagnostic procedures”, the regulations do not subject such products to FDA’s pre- and post-market controls for medical devices. However, in the future, certain of our products or related applications could become subject to regulation as medical devices by FDA.

For example, if we wish to label and market our products for use in performing clinical diagnostics, thus subjecting them to regulation by FDA as medical devices, unless an exemption applies, we would be required to obtain either prior 510(k) clearance or prior pre-market approval from the FDA before commercializing the product. The FDA classifies medical devices into one of three classes. Devices deemed to pose lower risk to the patient are placed in either class I or II, which, unless an exemption applies, requires the manufacturer to submit a pre-market notification requesting FDA clearance for commercial distribution pursuant to Section 510(k) of the FFDCA. This process, known as 510(k) clearance, requires that the manufacturer demonstrate that the device is substantially equivalent to a previously cleared 510(k) device or a “pre-amendment” class III device for which pre-market approval applications, or PMAs, have not been required by the FDA. This process typically takes from four to twelve months, although it can take longer. Most class I devices are exempted from this requirement. Devices deemed by FDA to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices, or those deemed not substantially equivalent to a legally marketed predicate device, are placed in class III. Class III devices typically require PMA approval. To obtain PMA approval, an applicant must demonstrate the safety and effectiveness of the device based, in part, on data obtained in clinical studies. PMA reviews generally last between one and two years, although they can take longer. Both the 510(k) and the PMA processes can be expensive and lengthy and may not result in clearance or approval. If we are required to submit our products for pre-market review by the FDA, we may be required to delay marketing while we obtain premarket clearance or approval from the FDA. There would be no assurance that we could ever obtain such clearance or approval.

Changes to a device that have received PMA approval typically require a new PMA or PMA supplement. Changes to a device that received 510(k) clearance which could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, require a new 510(k) clearance or possibly PMA approval. The FDA requires each manufacturer to make this determination initially, but the FDA can review any of these decisions and may disagree. If the FDA disagreed with our determination not to seek a new 510(k) clearance for a change to a previously marketed product, the FDA could require us to seek a new 510(k) clearance or pre-market approval. The FDA also could require us to cease manufacturing and/or recall the modified device until 510(k) clearance or pre-market approval was obtained. Also, in these circumstances, we could be subject to warning letters, significant regulatory fines or penalties, seizure or injunctive action, or criminal prosecution.

In some cases, our customers or collaborators may use our products in their own LDTs or in other FDA-regulated products for clinical diagnostic use. The FDA has historically exercised enforcement discretion in not enforcing the medical device regulations against LDTs. However, the FDA could assert jurisdiction over some or all LDTs, which may impact our customers’ uses of our products. A significant change in the way that the FDA regulates our products or the LDTs that our customers develop may require us to change our business model in order to maintain compliance with these laws. The FDA recently held a meeting in July 2010, during which it indicated that it intends to reconsider its policy of enforcement discretion and to begin drafting a new oversight framework for LDTs.

If our products become subject to regulation as a medical device, we would become subject to additional FDA requirements, and we could be subject to unannounced inspections by FDA and other governmental authorities, which could increase our costs of doing business. Specifically, manufacturers of medical devices must comply with various requirements of the FFDCA and its implementing regulations, including:

- the Quality System Regulation, which covers the methods and documentation of the design, testing, control, manufacturing, labeling, quality assurance, packaging, storage and shipping of our product;

- labeling regulations;
- medical device reporting, or MDR, regulations;
- correction and removal regulations; and
- post-market surveillance regulations, which include restrictions on marketing and promotion.

We would need to continue to invest significant time and other resources to ensure ongoing compliance with FDA quality system regulations and other post-market regulatory requirements.

Our failure to comply with applicable FDA regulatory requirements, or our failure to timely and adequately respond to inspectional observations, could result in enforcement action by the FDA, which may include the following sanctions:

- fines, injunctions and civil penalties;
- recall or seizure or our products;
- operating restrictions, partial suspension or total shutdown of production;
- delays in clearance or approval, or failure to obtain approval or clearance of future product candidates or product modifications;
- restrictions on labeling and promotion;
- warning letters, fines, or injunctions;
- withdrawal of previously granted clearances or approvals; and
- criminal prosecution.

International sales of medical devices are subject to foreign government regulations, which vary substantially from country to country. The primary regulatory environment in Europe is that of the European Union, or EU, which includes most of the major countries in Europe. Currently, 27 countries make up the EU. Other countries, such as Switzerland, have voluntarily adopted laws and regulations that mirror those of the EU with respect to medical devices. The EU has adopted numerous directives and standards regulating the design, manufacture, clinical trials, labeling and adverse event reporting for medical devices. Devices that comply with the requirements of a relevant directive will be entitled to bear the CE conformity marking, indicating that the device conforms to the essential requirements of the applicable directives and, accordingly, can be commercially distributed throughout Europe.

Outside of the EU, regulatory approval needs to be sought on a country-by-country basis in order to market medical devices. Although there is a trend towards harmonization of quality system standards, regulations in each country may vary substantially which can affect timelines of introduction.

Employees

As of September 30, 2010, we had 198 employees, of which 60 work in research and development, 31 work in general and administrative, 48 work in manufacturing and 59 work in sales and marketing.

None of our employees are represented by a labor union or are the subject of a collective bargaining agreement.

Property and Environmental Matters

We lease approximately 30,000 square feet of office and laboratory space at our headquarters in South San Francisco, California under a lease that expires in April 2015, approximately 28,000 square feet of manufacturing

and office space at our facility in Singapore under leases with varying expiration dates from October 2011 through July 2013. In addition, we lease office space in Paris, France, and Tokyo and Osaka, Japan on a month-to-month basis. We believe that our existing office, laboratory and manufacturing space, together with additional space and facilities available on commercially reasonable terms, will be sufficient to meet our needs for at least the next two years.

Our research and development and manufacturing processes involve the controlled use of hazardous materials, including flammables, toxics, corrosives and biologics. Our research and manufacturing operations produce hazardous biological and chemical waste products. We seek to comply with applicable laws regarding the handling and disposal of such materials. Given the small volume of such materials used or generated at our facilities, we do not expect our compliance efforts to have a material effect on our capital expenditures, earnings and competitive position. However, we cannot eliminate the risk of accidental contamination or discharge and any resultant injury from these materials. We do not currently maintain separate environmental liability coverage and any such contamination or discharge could result in significant cost to us in penalties, damages and suspension of our operations.

Legal Proceedings

We are not currently engaged in any material legal proceedings.

MANAGEMENT

Executive Officers and Directors

Our executive officers and directors, and their ages and positions as of November 30, 2010 are as set forth below:

Name	Age	Position
Gajus V. Worthington	40	President, Chief Executive Officer and Director
Vikram Jog	54	Chief Financial Officer
Fredric Walder	53	Chief Business Officer
Robert C. Jones	55	Executive Vice President, Research and Development
William M. Smith	59	Vice President, Legal Affairs, General Counsel and Secretary
Mai Chan (Grace) Yow	51	Vice President, Worldwide Manufacturing and Managing Director of Fluidigm Singapore Pte. Ltd.
Samuel Colella(2)(3)	71	Director
Jeremy Loh	39	Director
Kenneth Nussbacher(1)(3)	57	Director
Raymond J. Whitaker(1)(2)	63	Director
John A. Young(1)(3)	78	Director

(1) Member of the Audit Committee
(2) Member of the Compensation Committee
(3) Member of the Nominating and Governance Committee

Executive Officers

Gajus V. Worthington is a Co-Founder of Fluidigm and has served as our President and Chief Executive Officer and a Director since our inception in June 1999. From May 1994 to April 1999, Mr. Worthington held various staff and management positions at Actel Corporation, a public semiconductor corporation. Mr. Worthington received a B.S. in Physics and an M.S. in Electrical Engineering from Stanford University.

Vikram Jog has served as our Chief Financial Officer since February 2008. From April 2005 to February 2008, Mr. Jog served as Chief Financial Officer for XDx, Inc., a molecular diagnostics company. From March 2003 to April 2005, Mr. Jog was a Vice President of Applera Corporation, a life science company that is now part of Life Technologies, Inc., and Vice President of Finance for its related businesses, Celera Genomics and Celera Diagnostics. From April 2001 to March 2003, Mr. Jog was Vice President of Finance for Celera Diagnostics and Corporate Controller of Applera Corporation. Mr. Jog received a Bachelor of Commerce degree from Delhi University and an M.B.A. from Temple University. Mr. Jog is a member of the American Institute of Certified Public Accountants.

Fredric Walder has served as our Chief Business Officer since May 2010. From August 1992 to April 2010 he served in various senior executive positions at Thermo Fisher Scientific, a laboratory equipment and supplies manufacturer, including as Senior Vice President, Customer Excellence from November 2006 to April 2010 and Division President, Thermo Electron Corporation from January 2000 to November 2006. Mr. Walder holds a B.S. in Chemistry from the University of Massachusetts.

Robert C. Jones has served as our Executive Vice President, Research and Development since August 2005. From August 1984 to July 2005, Mr. Jones held various managerial and research and development positions at Applied Biosystems, a laboratory equipment and supplies manufacturer that was a division of Applera Corporation, including: Senior Vice President Research and Development from April 2001 to August 2005, Vice President and General Manager Informatics Division from 1998 to 2001, and Vice President PCR Business Unit from 1994 to 1998. Mr. Jones received a BSEE in Electrical Engineering and an MSEE in Computer Engineering from the University of Washington.

William M. Smith has served as our Vice President, Legal Affairs and General Counsel as well as our Secretary since May 2000 and served as a Director from May 2000 to April 2008. Mr. Smith served as an associate and then as a partner at the law firm of Townsend and Townsend and Crew, LLP from 1985 through April 2008. Mr. Smith received a J.D. and an M.P.A. from the University of Southern California and a B.A. in Biology from the University of California, San Diego.

Mai Chan (Grace) Yow has served as our Vice President, Worldwide Manufacturing, and Managing Director, Fluidigm Singapore Pte. Ltd., our Singapore subsidiary, since March 2006. From June 2005 to March 2006, Ms. Yow served as General Manager of Fluidigm Singapore Pte. Ltd. From August 2004 to May 2005, Ms. Yow served as Vice President Engineering (Asia) for Kulicke and Soffa, a public semiconductor equipment manufacturer. From March 1991 to July 2004, Ms. Yow served as Director, Assembly Operations, Plant Facilities and EHS, for National Semiconductor Singapore, a semiconductor fabrication subsidiary of National Semiconductor Corporation. Ms. Yow received a B.E. in Electronic Engineering from Curtin University, a Certificate in Management Studies from the Singapore Institute of Management and a Diploma in Electrical Engineering from Singapore Polytechnic.

Board of Directors

Samuel Colella has served as a member and Chairman of our board of directors since July 2000. Mr. Colella is a managing director of Versant Ventures, a healthcare venture capital firm he co-founded in 1999, and has been a general partner of Institutional Venture Partners since 1984. Mr. Colella is currently a member of the board of directors of Alexza Pharmaceuticals, Inc., Genomic Health, Inc. and Jazz Pharmaceuticals, Inc. and served on the board of directors of Solta Medical, Inc. from 1997 to 2007 and Symyx Technology, Inc. from 1997 to 2007. Mr. Colella received a B.S. in business and engineering from the University of Pittsburgh and an M.B.A. from Stanford University. We believe that Mr. Colella's qualifications to serve on our board and as Chairman include his broad understanding of the life science industry and his extensive experience working with emerging private and public companies, including prior service as chairman of boards of directors.

Jeremy Loh has served as a member of our board of directors since November 2010. Dr. Loh is a Vice President (Investments), San Francisco Centre for EDB Investments Pte Ltd, Singapore, which he joined in 2007. Dr. Loh had his postdoctoral training as a research scientist at Agency for Science, Technology and Research, or A*STAR, Singapore and Imperial College London. He has a Doctorate in Mechanical Engineering from the University of Southampton, U.K., and a Masters in Mechanical Engineering from Nanyang Technological University, Singapore. We believe Dr. Loh's qualifications to serve on our board include his background as a bioengineer, his experience in developing micro and nano devices and his experience managing investments in biomedical sciences companies for EDB Investments.

Kenneth J. Nussbacher has been a member of our board of directors since July 2003. From 2000 to 2009, Mr. Nussbacher served as an Affymetrix Fellow, a non-executive employee position, at Affymetrix, Inc., a biotechnology company. From 1995 to 2000, Mr. Nussbacher was Executive Vice President of Affymetrix, Inc. and from 1995 to 1997, he was also Chief Financial Officer of Affymetrix. Prior to joining Affymetrix, Mr. Nussbacher was Executive Vice President for business and legal affairs of Affymax Technologies N.V. Mr. Nussbacher also served on the board of directors of Symyx Technology, Inc. from 1995 to 2008 and XenoPort, Inc. from 2000 to 2009. He received a B.S. in Physics from Cooper Union and a J.D. from Duke University. We believe Mr. Nussbacher's qualifications to serve on our board include his understanding of the genomic research market and his experience as a chief financial officer, a board member with other public and private companies and as an executive responsible for business, financial, intellectual property and other legal matters.

Raymond J. Whitaker has been a member of our board of directors since December 2008. He has been a general partner, since its inception in January 2000, of EuclidSR Partners, L.P., a venture capital firm that focuses on life sciences and information technology companies. From 2001 to 2007, Dr. Whitaker served on the board of directors of Avalon Pharmaceuticals, Inc. Dr. Whitaker is a graduate of University College, Dublin and received a Ph.D. in biochemistry and an M.B.A from the National University of Ireland. We believe that Mr. Whitaker's qualifications to serve on our Board include his experience working with life science companies both as an executive and an investor.

Gajus V. Worthington is a Co-Founder of Fluidigm Corporation and has served as our President and Chief Executive Officer and a Director since our inception in June 1999. We believe that Mr. Worthington's qualifications to serve on our board include his understanding of our business, operations and strategy.

John A. Young has been a member of our board of directors since March 2001. Mr. Young retired as President and Chief Executive Officer of Hewlett-Packard Company, a diversified electronics manufacturer, in October 1992, where he had served as President and Chief Executive Officer since 1978. Mr. Young served as a director of Affymetrix, Inc. from 1992 until 2010, Vermillion, Inc., a molecular diagnostics company, from 1994 to 2008, and is currently a director of Nanosys, Inc., a nanotechnology company. Mr. Young received a B.S. in Electrical Engineering from Oregon State University and an M.B.A. from Stanford University. We believe that Mr. Young's qualifications to serve on our board include his extensive management experience.

Board Composition

Our board of directors is currently composed of six members. Immediately prior to this offering, our board of directors will be divided into three staggered classes of directors. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the same class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the Annual Meeting of Stockholders to be held during the years 2011 for the Class I directors, 2012 for the Class II directors and 2013 for the Class III directors.

- Our Class I directors will be Raymond J. Whitaker and Jeremy Loh.
- Our Class II directors will be John Young and Kenneth Nussbacher.
- Our Class III directors will be Samuel Colella and Gajus Worthington.

Our amended and restated certificate of incorporation and bylaws provide that the number of our directors shall be fixed from time to time by a resolution of the majority of our board of directors. Each officer serves at the discretion of the board of directors and holds office until his successor is duly elected and qualified or until his or her earlier resignation or removal. There are no family relationships among any of our directors or executive officers.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change of control. See "Description of Capital Stock—Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws" for a discussion of other anti-takeover provisions found in our certificate of incorporation.

Director Independence

Upon the closing of this offering, our common stock will be listed on The NASDAQ Global Market. Under the rules of The NASDAQ Stock Market LLC, independent directors must comprise a majority of a listed company's board of directors within a specified period of the closing of its initial offering. In addition, the rules of The NASDAQ Stock Market LLC require that, subject to specified exceptions, each member of a listed company's audit, compensation, and nominating and corporate governance committees be independent. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended. Under the rules of The NASDAQ Stock Market LLC, a director will only qualify as an "independent director" if, the company's board of directors affirmatively determines that the person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

In order to be considered to be independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors or any other board committee: (1) accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries.

In December 2010, our board of directors undertook a review of its composition, the composition of its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that none of Dr. Whitaker or Messrs. Colella, Nussbacher and Young, representing four of our six directors, has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the rules of The NASDAQ Stock Market LLC. In making this determination, our board of directors considered the relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director.

Board Committees

Our Board has an audit committee, a compensation committee and a nominating and governance committee, each of which has the composition and the responsibilities described below.

Audit Committee. Our audit committee oversees our corporate accounting and financial reporting process and assists the Board in monitoring our financial systems and our legal and regulatory compliance. Our audit committee is authorized to, among other things:

- oversee the work of our independent auditors;
- approve the hiring, discharging and compensation of our independent auditors;
- approve engagements of the independent auditors to render any audit or permissible non-audit services;
- review the qualifications and independence of the independent auditors;
- monitor the rotation of partners of the independent auditors on our engagement team as required by law;
- review our financial statements and review our critical accounting policies and estimates;
- review the adequacy and effectiveness of our internal controls; and
- review and discuss with management and the independent auditors the results of our annual audit, our quarterly financial statements, and our publicly filed reports.

The members of our audit committee are Kenneth Nussbacher, Raymond Whitaker and John Young. Mr. Nussbacher is our audit committee chairman. Our board of directors has concluded that the composition of our audit committee meets the requirements for independence under the current requirements of The NASDAQ Stock Market LLC and SEC rules and regulations. We believe that the functioning of our audit committee complies with the applicable requirements of The NASDAQ Stock Market LLC and SEC rules and regulations.

Compensation Committee. Our compensation committee oversees our corporate compensation programs. Our compensation committee is authorized to, among other things:

- review and recommend policy relating to compensation and benefits of our officers and employees;
- review and approve corporate goals and objectives relevant to compensation of our Chief Executive Officer and other senior officers;
- evaluate the performance of our officers in light of established goals and objectives;
- recommend compensation of our officers based on its evaluations; and
- administer the issuance of stock options and other awards under our stock plans.

The members of our compensation committee are Samuel Colella and Raymond Whitaker. Mr. Colella is the chairman of our compensation committee. Our board of directors has determined that each member of our compensation committee is independent within the meaning of the independent director guidelines of The NASDAQ Stock Market LLC. We believe that the composition of our compensation committee meets the requirements for independence under, and the functioning of our compensation committee complies with, any applicable requirements of The NASDAQ Stock Market LLC.

Nominating and Governance Committee. Our nominating and governance committee oversees and assists our Board of Directors in reviewing and recommending nominees for election as directors. The nominating and governance committee will also:

- evaluate and make recommendations regarding the organization and governance of the board and its committees;
- assess the performance of members of the board and make recommendations regarding committee and chair assignments;
- recommend desired qualifications for board membership and conduct searches for potential Board members; and
- review and make recommendations with regard to our corporate governance guidelines.

The members of our nominating and governance committee are Samuel Colella, Kenneth Nussbacher and John Young. Mr. Colella is our nominating and governance committee chairman. Our board of directors has determined that each member of our nominating and governance committee is independent within the meaning of the independent director guidelines of The NASDAQ Stock Market LLC.

Our board of directors may from time to time establish other committees.

Director Compensation

The following table sets forth information concerning compensation paid or accrued for services rendered to us by members of our board of directors for 2009. The table excludes Mr. Worthington, who is a named executive officer, and did not receive any compensation from us in his role as a director in 2009.

	Fees Earned or Paid in Cash ($)	Option Awards ($)(1)	Total ($)
Lawrence Chin(2)(5)	10,000	—	$10,000
Samuel D. Colella(5)(6)	30,000	—	$30,000
Michael Hunkapiller(3)(5)	10,000	—	$10,000
Kenneth J. Nussbacher(5)(6)	20,000	15,941(4)	$35,941
Raymond J. Whitaker(5)	10,000	—	$10,000
John A. Young(5)	10,000	—	$10,000

(1) Amounts represent the aggregate grant date fair value of the stock or option award calculated in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, Stock Compensation, as amended, without regard to estimated forfeitures, or, with respect to re-priced options, the incremental fair value as computed in accordance with FASB ASC Topic 718. See Note 10 of the notes to our audited consolidated financial statements for a discussion of valuation assumptions made in determining the grant date fair value and compensation expense of our stock options.
(2) Resigned from the board of directors on November 9, 2010.
(3) Resigned from the board of directors on May 6, 2010.
(4) This option was originally granted on December 28, 2007 and was re-granted in December 23, 2009 in connection with our re-pricing.
(5) Non-employee director annual retainer of $10,000, for service as a member of the Board effective as of January 1, 2009 but the payment of which is contingent in its entirety on the completion of a round of financing of at least $5.0 million.
(6) Non-employee director annual retainer of $10,000 for service as chairman of the board or a committee of the board effective as of January 1, 2009 but the payment of which is contingent in its entirety on the completion of financing of at least $5.0 million.

The aggregate number of shares subject to stock options outstanding at December 31, 2009 for each non-employee director is as follows:

Name	Aggregate Number of Stock Options Outstanding as of December 31, 2009
Lawrence Chin	—
Samuel D. Colella	—
Michael Hunkapiller	—
Jeremy Loh	—
Kenneth J. Nussbacher	57,142
Raymond J. Whitaker	—
John A. Young	—

Pre-Offering

Our board of directors adopted a compensation policy for non-employee directors on January 28, 2010 providing for an annual retainer of $10,000 for each non-employee director's service as a member of the board and a separate $10,000 annual leadership retainer for service as chairman of the board or a committee of the board, to be effective as of January 1, 2009. The payment of any such retainers was made contingent on the completion of a financing in which at least $5.0 million is raised. The policy also provided that each non-employee director will be automatically granted a stock option to purchase 15,000 shares of our common stock each year. Such stock option grants shall vest 1/12th per month, subject to such non-employee director's continued service on the board, such that the grant will be fully vested on the first anniversary of the vesting commencement date. These grants were made to each non-employee director on January 28, 2010.

Post-Offering

Upon consummation of our initial public offering, non-employee directors will receive an annual retainer of . The chairman of the audit committee will be paid an additional annual retainer of . The chairman of the compensation committee will be paid an additional annual retainer of . The chairman of the nominating and governance committee will be paid an additional annual retainer of .

Our outside director equity compensation policy was adopted by our board of directors on December , 2010 and will become effective immediately upon the completion of this offering. The policy is intended to formalize the granting of equity compensation to our non-employee directors under the 2011 Equity Incentive Plan. Non-employee directors may receive all types of awards under the 2011 Equity Incentive Plan, including discretionary awards not covered by the policy, except for incentive stock options. The policy provides for automatic and nondiscretionary grants of nonstatutory stock options subject to the terms and conditions of the policy and the 2011 Equity Incentive Plan.

Under the policy, we will automatically grant an option to purchase shares of our common stock to anyone who becomes a non-employee director following the effective date of the registration statement filed by us and declared effective with respect to any class of our securities, on the date such person first becomes a non-employee director. An employee director who subsequently ceases to be an employee, but remains a director, will not receive such an initial award.

In addition, each non-employee director will be automatically granted an annual stock option to purchase shares of our common stock on the date of each annual meeting beginning on the date of the first annual meeting that is held at least six months after such non-employee director received his or her initial award. In connection with the closing of this initial public offering, each non-employee director serving on our Board at the time of this offering will be automatically granted an option to purchase shares of our common stock at the price per share at which such common stock is sold in this offering.

The exercise price of all stock options granted pursuant to the policy will be equal to or greater than the fair market value of our common stock on the date of grant. The term of all stock options will be 10 years. Subject to the adjustment provisions of the 2011 Equity Incentive Plan, initial awards will vest as to 25% of the shares subject to such awards on each anniversary of the date of grant, provided such non-employee director continues to serve as a director through each such date. Subject to the adjustment provisions of the 2011 Equity Incentive Plan, the annual awards, including such awards granted in connection with this offering, will vest monthly over a twelve month period following the date of grant, provided such non-employee director continues to serve as a director through such date.

The administrator of the 2011 Equity Incentive Plan in its discretion may change or otherwise revise the terms of awards granted under the outside director equity compensation policy.

In the event of a "change of control," as defined in our 2011 Equity Incentive Plan, with respect to awards granted under the 2011 Equity Incentive Plan to non-employee directors, the participant non-employee director will fully vest in and have the right to exercise awards as to all shares underlying such award regardless of performance goals, vesting criteria or other conditions.

Code of Ethics and Employee Conduct

In December 2010, we adopted ethics and employee conduct that is applicable to all of our employees, officers and directors effective upon completion of this offering.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee is or was, during 2009, an officer or employee of our company. None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Executive Compensation

Compensation Discussion and Analysis

Overview

We seek to have a compensation program that supports a team ethic among our management, fairly rewards executives for corporate and individual performance and provides incentives for executives to meet or exceed our short and long term goals. The primary components of our compensation program are base salary, an annual incentive bonus plan, and option awards. In addition, we provide our executive officers with severance and change of control benefits and typical health and other benefits that are available generally to all salaried employees. Historically our compensation committee has had principal responsibility for evaluating executive compensation and either the compensation committee or the independent members of our board of directors were responsible for final approval. After this offering, we expect our compensation committee will have principal responsibility for approving executive compensation following consultations with our independent directors. In addition, to comply with Rule 16b-3 of the Securities Exchange Act of 1934, we expect equity incentive for executive officers to be approved, on recommendation of the compensation committee, by a committee or our directors who qualify as "non-employee directors" pursuant to the rule.

For 2009, our named executive officers were:

- Gajus Worthington, President and Chief Executive Officer,
- Vikram Jog, Chief Financial Officer,

- William Smith, Vice President, Legal Affairs and General Counsel,
- Robert Jones, Executive Vice President, Research and Development, and
- Grace Yow, Vice President, Worldwide Manufacturing and Managing Director, Fluidigm Singapore.

Objectives and Principles of Our Executive Compensation

The primary goal of our executive compensation program is to ensure that we hire and retain talented and experienced executives who are motivated toward achieving or exceeding our short-term and long-term corporate goals. As a starting point, we believe that it is critical that our executive officers work together as a team and look beyond departmental lines to achieve overall corporate goals rather than focusing exclusively on individual departmental objectives. Our compensation philosophy is team oriented and our success is dependent on what our management team can accomplish together. Therefore, we seek to provide our named executive officers with comparable levels of base salary, bonuses and annual equity awards that are based largely on overall company performance.

In determining the form and amount of compensation payable to our named executive officers, we are guided by the following objectives and principles:

- *Team oriented approach to establishing compensation levels*. Our team oriented approach is demonstrated by the fact that the salaries of our executive officers are very similar. While the compensation level of Mr. Worthington, our Chief Executive Officer, or CEO, is marginally higher than our other executive officers, it is based on our compensation philosophy of providing our named executive officers with comparable levels of compensation, rather than on levels reported in market surveys of other companies in the life science industry.
- *Compensation should relate directly to performance and incentive compensation should constitute a significant portion of total compensation.* We strongly believe that executive compensation should be directly linked to our performance. Our compensation program is designed so that a significant portion of the potential compensation of all of our executive officers is contingent on the achievement of our business objectives. In rewarding performance, we seek to reward both short and long term performance. We expect our executive leadership to manage our company so that we achieve our annual goals while at the same time positioning us to achieve our longer term strategic objectives. Short term elements of compensation include annual salary reviews, stock option awards and incentive bonuses that are tied closely to achieving our corporate goals and, to a lesser extent, on achieving departmental performance objectives. Long term elements of compensation have historically been limited to stock options with multi-year vesting designed to retain executives and align their long term interests with those of our stockholders. In 2008, we began to grant stock options with performance related vesting to more closely align the options awards with performance.
- *Align compensation decisions with internal considerations rather than industry benchmarks.* We believe that hiring and retaining well performing executives is important to our ongoing success. While we have at times reviewed generally available surveys on executive compensation to confirm that our compensation decisions do not result in compensation levels that are dramatically different from other companies in our industry, the compensation committee has not in the past attempted to benchmark our executive compensation against any particular indices or salary surveys. While occasional review of market surveys is considered helpful, the compensation committee has historically placed substantially greater weight on internal considerations than on position-specific pay differences found in the market.

Except as described below, neither the board of directors nor the compensation committee has adopted any formal or informal policies or guidelines for allocating compensation between cash and non-cash compensation, among different forms of non-cash compensation or with respect to long and short term performance. The determination of our board of directors or compensation committee as to the appropriate use and weight of each

component of executive compensation is subjective, based on their view of the relative importance of each component in meeting our overall objectives and factors relevant to the individual executive. Historically, our board of directors has focused significantly on the affordability of our compensation arrangements. As a result, when weighting forms of compensation, our board of directors and the compensation committee have historically placed greater emphasis on non-cash equity incentive compensation together with base salary.

As a publicly held company, we may periodically engage the services of a compensation consultant to assist us in further aligning our compensation philosophy with our corporate objectives. In addition, in order to attract and retain key executives, we may be required to modify individual executive compensation levels to remain competitive in the market for such positions.

Compensation Process and Compensation Committee

During fiscal 2009 and through May 2010, the compensation committee consisted of Messrs. Colella, Nussbacher and Michael Hunkapiller, who was formerly a member of our board of directors. After Mr. Hunkapiller's resignation from the board, the compensation committee was restructured to consist of Messrs. Colella and Whitaker, each of whom is an independent director under the rules of The NASDAQ Stock Market LLC but is not a "non-employee director" for purposes of Rule 16b-3 under the Securities Exchange Act of 1934, as amended.

The compensation committee is responsible for evaluating our compensation structure and goals and individual compensation levels. Depending on the authority granted it to by the board of directors, the compensation committee either approves specific compensation decisions or makes recommendations to our board of directors for consideration and approval by the independent members of the board. The compensation committee makes its compensation recommendations based on input from Mr. Worthington and the judgment of its members based on their tenure and experience in our industry. The compensation committee has the responsibility for formulating, evaluating and recommending to our board of directors the compensation of our executive officers. Historically, our annual compensation review process has been initiated by Mr. Worthington who performs a review of the performance of each executive officer in the prior year and makes proposals regarding the elements of compensation, corporate and individual goals and compensation levels for our executive officers including himself. Mr. Worthington's proposals for compensation structure, goals and individual compensation levels are typically based on discussions with and directions from members of the compensation committee.

Compensation levels and mix for Mr. Worthington, our Chief Executive Officer, are recommended by the compensation committee based on the committee's assessment of our overall corporate performance and Mr. Worthington's contribution to that performance. While Mr. Worthington provides input on his compensation, he does not participate in compensation committee or board deliberations regarding his own compensation. As it does for other members of our executive team, the compensation committee determines Mr. Worthington's compensation based on achievement of corporate and departmental objectives, his individual performance, and compensation levels of other members of our executive team, rather than attempting to tie Mr. Worthington's compensation to a specific percentile of CEO compensation reported in market compensation surveys.

Subject to any limitations or guidelines that may be adopted by our board of directors in the future, the compensation committee has the authority to approve the grant of stock options or stock purchase rights to individuals eligible for such grants, including officers and directors. The compensation committee met four times during 2009 and has met three times during 2010.

The compensation committee has the authority under its charter to engage the services of outside advisors, compensation experts and others for assistance and has sole authority to approve the terms of any such engagement. The compensation committee did not engage any such advisors in 2009 and 2010 nor did it rely on any compensation surveys.

Corporate and Departmental Performance Goals

2009 Corporate Goals. Our corporate and individual performance goals for each year are formulated by the board of directors with input from the compensation committee and our Chief Executive Officer. For 2009, five corporate goals were established. They were (i) achieving a specified level of revenue; (ii) achieving certain operating margins; (iii) limiting operating expenditures to a specified level; (iv) achieving target levels of funding and (v) generating a specified number of new customer leads. The compensation committee believed attaining these goals would take a high level of executive performance and that such goals would be very challenging given the difficult economic environment and the need to launch and obtain market acceptance of new products. The committee did not assign weights to these goals when they were approved but instead decided that it would assign weights to them when it determined cash bonuses and performance stock option vesting.

2009 Departmental Goals. Departmental goals for 2009 for each of our named executive officers were as follows:

Named Executive Officer	2009 Departmental Goals
Gajus Worthington, Chief Executive Officer	Achievement of all the goals specified for the other Named Executive Officers below, and achieving sales goals on a region by region basis. These sales goals include unit volumes for particular systems, dollar amounts of chip sales, and average selling prices of chips and instruments.
Vikram Jog, Chief Financial Officer	Raising target levels of capital, ensuring no material weakness or significant deficiencies in quarterly reviews and annual audit, ensuring the accurate and timely closing of our books and completion of our 2008 audit.
William Smith, Vice President, Legal Affairs and General Counsel	Maintaining intellectual property position for the BioMark business, reducing legal expenditures, raising target levels of capital, selling unit volumes of product and renegotiating a specified contract to reduce costs.
Robert Jones, Executive Vice President, Research and Development	Launching four specified products and achieving target cost levels for specified instrumentation.
Mai Chan (Grace) Yow, Vice President, Worldwide Manufacturing and Managing Director of Fluidigm Singapore	Launching specified products, achieving target cost levels for specified instrumentation and achieving target manufacturing yields for specified chips.

2010 Corporate Goals. Our 2010 corporate goals were proposed by Mr. Worthington and revised and approved by our compensation committee. They are: (i) achieving specified financial metrics relating to margins and net income; (ii) achieving a specified level of net cash flow; (iii) achieving product development milestones relating to new product launches, a partnership transaction and a peer-reviewed publication in a particular area; (iv) increasing our identified sales opportunities to specified levels for each of our three actively marketed microfluidic systems. The compensation committee believed attaining these goals would take a high level of executive performance and that certain goals, such as the financial metrics goals would be achievable only if there was a sustained improvement in economic conditions generally and in the life science industry in particular. As in 2009, the committee did not assign weights to these goals when they were approved but has reserved the authority to assign weights to them when determining bonuses and performance stock option vesting.

2010 Departmental Goals. The compensation committee did not define specific departmental goals in 2010 as it felt that the corporate goals were broad and challenging enough that it was sufficient that each department focus on achieving those goals. As such, the compensation committee intends to determine the departmental component of bonuses based on the extent to which each executive’s performance contributed to achieving or not achieving the corporate goals.

Elements of Executive Compensation

Our executive compensation program consists of four main elements: base salary, an annual incentive bonus plan, option awards and change of control arrangements. The following is a discussion of each element.

Base Salary

Since 2007, the compensation committee and the board of directors have developed our compensation policy with the view that our company and its stockholders would be best served if compensation policies focused on creating a team ethic among our executive officers. A central element of this policy is that a team ethic will be best supported if all executive officers received approximately the same salary. For 2008, Messrs. Smith and Jones were paid the same base salary of $275,600. Ms. Yow receives a base salary of $226,854 (paid in Singapore Dollars) which we believe was an equivalent salary taking into account the lower cost of living in Singapore where she is based. Mr. Jog received a slightly higher salary of $278,000 pursuant to an offer letter we entered into with him when he joined us in 2008, which salary amount was designed to attract Mr. Jog to us and provide him with a salary comparable to his salary at his former position. Mr. Worthington's base salary of $294,840 reflected the substantial additional responsibility he has as Chief Executive Officer as compared to the other executive officers.

In April 2009, the compensation committee reviewed 2009 base salaries in light of general market conditions in the San Francisco Bay Area life science industry and our financial condition. The compensation committee concluded that due to the depressed economic conditions locally and nationally and our constrained financial position that no increases in compensation were appropriate. However, given the ongoing competition for executive talent in the industry and region, the specialized skills and experiences required to manage life science companies and the overall strong performance of the executive team, the compensation committee decided not to reduce salaries. The compensation committee's assessment of general market conditions in the life science industry, and the life science industry in the San Francisco Bay Area in particular, was based on the experience of the committee members who were and are actively involved in venture capital investing in such industry and area. The compensation committee did not rely on any formal compensation survey data in making its assessment.

In January 2010, the compensation committee again reviewed base salaries for our executive officers using the same methodology used in 2009. The compensation committee concluded that economic conditions locally and nationally had stabilized and were improving but were not yet robust. The compensation committee also concluded that hiring in the life science industry in the San Francisco Bay Area had increased somewhat and that there was greater competition for executive talent. As our executive officers had forgone raises in 2009, the compensation committee felt that modest raises of between 2% and 4% were appropriate to keep our executive salaries competitive. Where each executive fell in this range was based on the extent to which the executive achieved his or her departmental goals in 2009. The compensation committee approved the following base salaries for 2010: Gajus Worthington, $303,644, an increase of 3%; Vikram Jog, $289,120, an increase of 4%; Bob Jones, 281,112, an increase of 2%; Bill Smith, $286,624, an increase of 4%; and Grace Yow, $234,467, an increase of 3%. However, because of our financial position and ongoing losses, the compensation committee determined that these salaries will not be implemented until a specified financing goal is achieved at which time the salary increases will be paid retroactive to the beginning of 2010. Completion of this offering and raising the amounts contemplated hereby will satisfy this financing goal and cause the new salary structure to be implemented and the deferred salary increases to be paid.

Incentive Bonus Plan

For 2009, the compensation committee and the board of directors established a bonus structure for all named executive officers that provided for performance bonuses of up to 35% of base salary for each officer. 80% of the performance bonus was payable based upon our reaching our corporate goals described above, and the remaining 20% was payable to each executive based on the attainment of his or her departmental goals

described above. Payment of performance bonuses was allocated among corporate and departmental goals in this manner in recognition of our compensation philosophy in which the compensation committee sought to incentivize executive officers to look beyond their departmental goals and work with other executive officers to achieve our overall corporate goals. The entire bonus of 35% of salary was payable to an executive only if all of the corporate goals and all of his or her departmental goals were attained. If a particular corporate or department goal was only partially attained, then the compensation committee would determine in its discretion whether all, part, or none of the portion of the bonus tied to that goal would be awarded; provided that, no bonus was payable with respect to a goal where performance was less than 80% of the targeted level. The 80% requirement was set so that executives would receive a bonus only for high levels of performance. For departmental goals, each goal was treated as having equal weight, so an equal portion of the executive's bonus is tied to attaining each goal. The weighting of the corporate goals was not pre-determined as the compensation committee wished to retain the ability to adjust the bonus payments based on an analysis of how attainment or failure to attain each particular goal impacted us. The compensation committee also retained the discretion to change the bonus structure and increase or decrease the bonus payment amounts as it considered appropriate.

Achievement of Corporate Goals in 2009

In January 2010, the compensation committee reviewed our performance in 2009 and determined that three of our five corporate goals had been fully met and two had partially more met. Specifically, it concluded that:

(i) We had partially met our revenue goal. Our revenue was more than 80% of the targeted level but not equal to the target. The compensation committee determined in its discretion to award 40% of the bonus tied to achievement of this goal.

(ii) We had partially met our margin goal. Our margins were better than had been targeted, but this level was achieved only by including in revenue the unanticipated receipt of a license fee in the fourth quarter of 2009 which positively impacted our margins. The compensation committee determined in its discretion to award 94% of the bonus tied to achievement of this goal.

(iii) We had fully achieved our operating expense goal. Our operating expenses were below targeted levels.

(iv) We had fully achieved our financing goals. We raised less than the targeted amount of financing, but the compensation committee deemed the goal fully achieved because of the extremely difficult financing environment in 2009 and the favorable valuation which we achieved.

(v) We had fully achieved our customer leads goal. We generated more leads than were targeted.

In weighting these goals, the compensation committee decided that our revenue goal should be weighted at 60% and the other goals at 10% each, because it viewed achieving greater revenue as the most critical element of our long term success at this stage of our development. Applying the percentage achievement to the weighting of the goals, the compensation committee determined that our corporate goals had been 60% met which equated to a bonus equal to 17% of base salary for each executive officer for attainment of those goals.

Achievement of Department Goals in 2009

The compensation committee also considered the achievement of 2009 departmental performance goals in January 2010 and made the following determinations with respect to each of the executive officers:

Gajus Worthington, Chief Executive Officer. Mr. Worthington partially met his goal related to the attainment by each individual executive officer of their departmental goals as our executives met or partially met some but not all of their departmental goals. In addition, Mr. Worthington met the sales goal for the United States but not for Europe. The compensation committee equally weighted and averaged the attainment of each of the sales goals and each of the departmental goals and awarded Mr. Worthington 45% of the bonus associated with his attaining his departmental goals.

Vikram Jog, Chief Financial Officer. Mr. Jog fully met his departmental goals as the compensation committee deemed that he raised the targeted amount of capital, there were no material weaknesses or deficiencies in our quarterly reviews or audits, our books were accurately closed in a timely manner each quarter and our 2008 audit was completed. Therefore, the compensation committee awarded Mr. Jog 100% of the bonus associated with his attaining his departmental goals.

William Smith, Vice President Legal Affairs and General Counsel. Mr. Smith fully met four of his five goals as he maintained the intellectual property position of our BioMark business, reduced legal expenditures by the targeted amount, raised the targeted amount of capital, and achieved targeted cost reductions through a contract renegotiation. However, his sales goal was only 50% met because he did not achieve the targeted unit volume of sales. The compensation committee equally weighted each goal and awarded Mr. Smith 90% of the bonus associated with his attaining of his departmental goals.

Robert Jones, Executive Vice President, Research and Development. Mr. Jones met only one of his four goals with respect to product launches as only one product was launched when targeted. In addition, Mr. Jones did not meet his goals with respect to the cost of goods. Therefore, the compensation committee award Mr. Jones 20% of the bonus associated with his attaining his departmental goals.

Grace Yow, Vice President, Worldwide Manufacturing. Ms. Yow met two of her four goals for product launches; though those two products launched later than planned, the compensation committee deemed that the manufacturing department was not responsible for the delay. Ms. Yow partially met her goals for manufacturing yields and costs of goods as the specified targets were met in some, but not all, quarters. The compensation committee deemed that each of these goals were 50% attained. The compensation committee equally weighted each goal and awarded Ms. Yow 60% of the bonus associated with her attaining her departmental goals.

As with the executive salary increases described above, the compensation committee determined that payment of bonuses to executives for their 2009 performance would be deferred until the same financing goal was achieved. The amounts contemplated to be raised in this offering would satisfy that milestone and would trigger payment of these bonuses.

We intend for the bonus plan to provide a significant portion of an executive's potential compensation. It is designed to help ensure that executives are focused on our near-term performance and on working together to achieve key corporate objectives. We expect that corporate and departmental goals will be reviewed each year and adjusted to reflect changes in our stage of development, competitive position and corporate objectives. As discussed above, the compensation committee and the board of directors retain the discretion to award compensation absent attainment of a relevant performance goal and to reduce the size of an award following attainment of a relevant performance goal, and exercised that discretion in 2009. We believe that maintaining this flexibility is helpful in ensuring that executives are appropriately compensated for their performance and are neither rewarded nor penalized as a result of unusual circumstances that were not foreseeable at the time the goals were developed.

The compensation committee has concluded that the 2009 bonus plan was effective and, therefore, our 2010 bonus plan has the same structure and bonus percentages with updated corporate and departmental goals.

Option Awards

We grant options to new executives upon the commencement of their employment and on an annual basis consider making additional grants to existing executives based on our overall corporate performance, individual performance and the executives' existing option grants and equity holdings. In addition, on an annual basis we make option grants to our executive officers that have provisions for accelerated vesting if corporate or departmental goals are achieved. We believe that option awards are an effective means of aligning the interests of executives and stockholders, rewarding executives for our achieving success over the long term and providing executives an incentive to remain with us.

In 2009, the compensation committee recommended and the Board approved two performance based option grants to each of our executive officers — one based on attainment of our 2009 corporate goals and one based on attainment of the executive's 2009 departmental goals. Each executive was awarded an option to purchase 10,000 shares related to the achievement of departmental goals and an option to purchase 10,000 shares related to attainment of corporate goals. The compensation committee's selection of an aggregate grant of 20,000 shares was based on the committee's determination that such number of shares would provide meaningful compensation to our executive officers and meaningful incentive to achieve the corporate and departmental goals. The committee did not rely on compensation surveys or other third party sources in arriving at this number.

- For the first option grant, 25% of the shares subject to the grant would vest on April 1, 2010 and 1/48th of the shares would vest each month thereafter; provided, that a percentage of the option equal to the percentage of corporate goals that are achieved would become fully vested as of December 31, 2009. Thus, for 2009, because the committee determined that 60% of our corporate goals had been achieved, 60% of the performance options related to the attainment of corporate goals vested effective as of December 31, 2009. 25% of the remaining 40% of such performance options vested on April 1, 2010 and 1/48th of the remaining unvested shares will vest each month thereafter.
- For the second option grant, all of the shares subject to the option will vest on December 31, 2012, provided that a percentage of the option equal to the percentage of the executive's departmental goals that are achieved would become fully vested effective as of December 31, 2009. Thus, for each executive officer all or a portion of their option became vested on December 31, 2009 based on their attainment of their departmental goals.

We believe that these performance related option grants provide an additional incentive for executives to achieve corporate and departmental goals for each year while also providing them a form of compensation that is appropriately linked to our long term success.

In November 2009, the board granted to Mr. Worthington an option to purchase 25,975 shares vesting over four years. The number of shares subject to this grant is equal to the number of shares Mr. Worthington surrendered in 2008 in connection with the repayment of a loan we had made to him. The compensation committee made this grant in order to give Mr. Worthington the opportunity restore his original equity position by providing continuing services to us. In addition, in November 2009, the compensation committee granted Mr. Worthington two options to purchase 14,285 shares. These options were performance related grants which the compensation committee had intended to grant to Mr. Worthington in 2008 at the same time it made similar grants to all other executive officers. As a result of an administrative error, the grants were not made in 2008, so the compensation committee made these grants to correct that oversight.

Our compensation committee has concluded that performance related options grants are an effective form of equity compensation and has determined that it will make grants of the same amount and with the same structure tied to achievement of our 2010 corporate and departmental goals. We expect that these grants will be made in December 2010.

Employment and Severance Agreements

In February 2008, we entered into Employment and Severance Agreements with each of our named executive officers that provide for specified payments and benefits if the officer's employment is terminated without cause, or if the officer's employment is terminated without cause or for good reason within 12 months following a change of control. The terms of these agreements are described under "Potential Payments upon Termination or Change of Control." We adopted these arrangements because we recognize that we will from time to time consider the possibility of an acquisition by another company or other change of control transaction and that such consideration can be a distraction to our executive officers and can cause such officers to consider alternative employment opportunities. Accordingly, our board of directors concluded that it is in the best interests of our company and its stockholders to provide executives with certain severance benefits upon termination of employment without cause or for good reason following a change of control. Our board determined to provide

such executives with certain severance benefits upon their termination of employment without cause outside of the change of control context in order to provide executives with enhanced financial security and incentive to remain with our company. In addition, we believe that providing for acceleration of options if an officer is terminated following a change of control transaction aligns the executive officer's interest more closely with those of other stockholders when evaluating the transaction rather than putting the officer at risk of losing the benefits of those equity incentives.

In determining the amount of cash payments, benefits coverage and acceleration of vesting to be provided to officers upon termination prior to a change of control or within 12 months following a change of control, our Board considered the following factors:

- the expected time required for an officer to find comparable employment following a termination event;
- feedback received from potential candidates for officer positions at our company as to the level of severance payments and benefits they would require to leave other employment and join our company;
- in the context of a change of control, the amount of vesting acceleration that would align the officer's interests more closely with the interests of stockholders when considering a potential change of control transaction; and
- the period of time following a change of control during which management positions are evaluated and subject to a heightened risk of elimination.

In addition, all outstanding options granted to our employees will become fully vested upon a change of control if the options are not assumed by the acquiring company.

Other Benefits

Executive officers are eligible to participate in all of our employee benefit plans, such as medical, dental, vision, group life, disability, accidental death and dismemberment insurance, and our 401(k) plan, in each case on the same basis as other employees, subject to applicable law. We also provide vacation and other paid holidays to all employees, including our executive officers, which we believe are comparable to those provided at peer companies.

During 2009, we offered all employees of the company the opportunity to exchange their outstanding options with exercise prices above the then fair value of our common stock, for new options for the same number of shares with an exercise price equal to the then fair value of our common stock and a lengthened vesting schedule. Our executive officers were entitled to participate in this program and all did so.

Accounting and Tax Considerations

Section 162(m) of the Internal Revenue Code of 1986, as amended, or the Code, places a limit of $1,000,000 on the amount of compensation that we may deduct as a business expense in any year with respect to our Chief Executive Officer and certain of our highly paid executive officers. We can, however, preserve the deductibility of certain performance-based compensation in excess of $1,000,000 if the conditions of Code Section 162(m) are met. Under applicable tax guidance for newly-public companies, the deduction limitation generally will not apply to compensation paid pursuant to any plan or agreement that existed before the company became publicly held. In addition, compensation provided by newly-public companies through the first stockholder meeting to elect directors after the close of the third calendar year following the year in which the initial public offering occurs, or earlier upon the occurrence of certain events (e.g., a material modification of the plan or agreement under which the compensation is granted), will not be included for purposes of the Code Section 162(m) limit provided the arrangement is adequately described in this prospectus. Accordingly, we believe that deductibility of all income recognized by executives pursuant to equity compensation granted by us prior to this offering, as well as any equity compensation granted by us under the 2011 Equity Incentive Plan

following this offering through the expiration of the reliance period, will not be limited by Code Section 162(m). While the compensation committee cannot predict how the deductibility limit may impact our compensation program in future years, the compensation committee intends to maintain an approach to executive compensation that strongly links pay to performance. While the compensation committee has not adopted a formal policy regarding tax deductibility of compensation paid to our executive officers, the compensation committee intends to consider tax deductibility under Section 162(m) as a factor in compensation decisions.

Code Section 409A imposes additional taxes on certain non-qualified deferred compensation arrangements that do not comply with its requirements. These requirements regulate an individual's election to defer compensation and the individual's selection of the timing and form of distribution of the deferred compensation. Code Section 409A generally also provides that distributions of deferred compensation only can be made on or following the occurrence of certain events (i.e., the individual's separation from service, a predetermined date, a change in control, or the individual's death or disability). For certain executives, Code Section 409A requires that such individual's distribution commence no earlier than six (6) months after such officer's separation from service. We have and will continue to endeavor to structure our compensation arrangements to comply with Code Section 409A so as to avoid the adverse tax consequences associated therewith.

Summary Compensation Table

The following table presents information concerning the total compensation of our Chief Executive Officer, Chief Financial Officer and our three other most highly compensated officers during the last fiscal year who were serving as executive officers at the end of 2009 (the "Named Executive Officers") for services rendered to us in all capacities in 2009:

Summary Compensation Table

Name and Principal Position	Year	Salary ($)	Option Awards ($)(1)	Non-Equity Incentive Plan Compensation ($)(2)	Total ($)
Gajus V. Worthington President and Chief Executive Officer	2009	294,840	203,948	59,402	558,190
Vikram Jog Chief Financial Officer	2009	278,000	246,340	66,720	591,060
Robert C. Jones Executive Vice President Research and Development	2009	275,600	133,224	51,675	460,499
William M. Smith Vice President, Legal Affairs, and General Counsel	2009	275,600	190,875	64,215	530,590
Mai Chan (Grace) Yow(3) Vice President, Worldwide Manufacturing and Managing Director of Fluidigm Singapore	2009	226,854	191,688	44,928	463,470

(1) Amounts represent the aggregate fair market value of options granted in 2009 to the named executive officer calculated in accordance with FASB ASC 718 without regard to estimated forfeitures. For options granted in connection with our repricing, only the incremental value of the grant is included. See Note 10 of the notes to our audited consolidated financial statements for a discussion of assumptions made in determining the grant date fair value and compensation expense of our stock options.

(2) The amounts in this column represent total performance-based bonuses earned for service rendered during fiscal 2009 under our incentive bonus plan. Payment of these bonuses has been deferred until specified financing goals are achieved. For a description of our 2009 bonus plan, please see "Incentive Bonus Plan" under "Compensation Discussion and Analysis" above for additional information regarding our fiscal 2007 cash bonuses.

(3) Ms. Yow's salary is determined and paid in Singapore dollars, but, for purposes of this table, the amount was converted to U.S. Dollars using the exchange rate as of December 31, 2009. The bonus amount was determined in U.S. Dollars but will be paid in Singapore dollars based on the exchange rate at the time of payment.

Grants of Plan-Based Awards

The following table presents information concerning grants of plan-based awards to each of the Named Executive Officers during 2009.

Grants of Plan-Based Awards

Name	Grant Date	Estimated Payouts Under Non-Equity Incentive Plan Awards Target ($)	Estimated Payouts Under Equity Incentive Plan Awards Target (#)	All Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards ($/Sh)(1)	Grant Date Fair Value of Stock and Option Awards($) (2)
Gajus V. Worthington	11/17/2009		10,000(3)		2.36	13,000
	11/17/2009		10,000(4)		2.36	12,700
	11/17/2009			14,285(5)	2.36	17,856
	11/17/2009			14,285(5)	2.36	17,856
	11/17/2009			25,975(23)	2.36	35,066
	12/23/2009			44,285(6)	2.57	54,471
	12/23/2009			20,000(7)	2.57	27,600
	12/23/2009			19,999(8)	2.57	25,399
Vikram Jog	11/17/2009		10,000(3)		2.36	12,500
	11/17/2009		10,000(4)		2.36	12,700
	12/23/2009			142,857(9)	2.57	184,285
	12/23/2009			14,285(10)	2.57	18,285
	12/23/2009			14,285(11)	2.57	18,570
Robert C. Jones	11/17/2009		10,000(3)		2.36	13,300
	11/17/2009		10,000(4)		2.36	12,700
	12/23/2009			22,856(12)	2.57	28,113
	12/23/2009			14,285(13)	2.57	18,428
	12/23/2009			14,285(14)	2.57	18,570
	12/23/2009			11,428(15)	2.57	14,513
	12/23/2009			20,000(7)	2.57	27,600
William M. Smith	11/17/2009		10,000(3)		2.36	12,500
	11/17/2009		10,000(4)		2.36	12,700
	12/23/2009			28,571(16)	2.57	33,999
	12/23/2009			21,008(17)	2.57	26,050
	12/23/2009			12,706(18)	2.57	15,628
	12/23/2009			20,000(7)	2.57	27,600
	12/23/2009			19,999(8)	2.57	25,399
	12/23/2009			14,285(13)	2.57	18,428
	12/23/2009			14,285(14)	2.57	18,571
Mai Chan (Grace) Yow	11/17/2009		10,000(3)		2.36	12,800
	11/17/2009		10,000(4)		2.36	12,700
	12/23/2009			14,285(19)	2.57	17,142
	12/23/2009			56,857(20)	2.57	69,934
	12/23/2009			20,000(21)	2.57	27,600
	12/23/2009			14,285(13)	2.57	18,428
	12/23/2009			14,285(14)	2.57	18,570
	12/23/2009			11,428(22)	2.57	14,514

(1) Our shares of common stock were not publicly traded during the 2009. The exercise price of all options was the fair value of a share of our common stock on the date of grant as determined in good faith by our board of directors.

(2) Amounts represent the grant date fair value of the stock options, calculated in accordance with FASB ASC Topic 718 without regard to estimated forfeitures, or, in the case of grants made as part of our repricing, amounts represent the incremental fair value of the stock options granted calculated in accordance with FASB ASC Topic 718. See note 10 of the notes to our audited consolidated financial statements for a discussion of assumptions made in determining the grant date fair value or incremental fair value of our stock options.

(3) These options were granted on November 17, 2009 and are performance related options tied to achievement of 2009 departmental goals. Effective as of December 31, 2009, 4,500 shares, 10,000 shares, 9,000 shares, 2,000 shares and 6,000 shares subject to these grants vested for Mr. Worthington, Mr. Jog, Mr. Smith, Mr. Jones and Ms. Yow, respectively. The remaining unvested shares subject to these grants will vest on December 31, 2012.

(4) These options were granted on November 17, 2009 and are performance related grants tied to achievement of 2009 corporate goals. 6,100 shares vested effective as of December 31, 2009. 975 of the shares vested on April 1, 2010 and 81 shares vest at the end of each month thereafter.
(5) These options were granted on November 17, 2009. 11,071 shares subject to the options were vested as of the date of grant and 119 shares vest each month on after December 1, 2009.
(6) This option was originally granted on May 8, 2007 and was re-granted on December 23, 2009 as part of our option re-pricing. 21,516 of the shares subject to this grant were vested as of re-grant date, 20,000 shares vest as of February 1, 2010, and 923 shares vest each month thereafter.
(7) These options were originally granted on April 23, 2008 and were re-granted on December 23, 2009 as part of our option re-pricing. None of the shares subject to the grants were vested as of re-grant date, 18,750 shares vest as of December 31, 2011, and 417 shares vest each month thereafter.
(8) This option was originally granted on April 23, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 18,748 of the shares subject to the grant were vested as of re-grant date, and 417 shares vest each month on and after January 22, 2010.
(9) This option was originally granted on February 7, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 56,547 of the shares subject to the grants were vested as of re-grant date, and 2,977 shares vest each month on and after January 7, 2010.
(10) This option was originally granted on February 7, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 9,022 of the shares subject to the grants were vested as of re-grant date, 168 shares vest each month on and after January 1, 2010 until March 1, 1012, and 297 shares will vest each month on and after March 1, 2012.
(11) This option was originally granted on February 7, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 9,106 of the shares subject to this grant were vested as of re-grant date, 4,286 shares will vest on December 31, 2011 and 297 shares will vest each month thereafter.
(12) This option was originally granted on May 8, 2007 and was re-granted on December 23, 2009 as part of our option re-pricing. 1,428 shares subject to this grant were vested as of the re-grant date, 19,999 shares vest as of February 1, 2010, and 477 shares vest each month thereafter.
(13) This option was originally granted on April 23, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 10,535 of the shares subject to the grant were vested as of re-grant date, 2,857 shares vest as of December 31, 2011, and 298 shares will vest each month thereafter.
(14) These options were originally granted on April 23, 2008 and were re-granted on December 23, 2009 as part of our option re-pricing. 9,022 of the shares subject to the grants were vested as of re-grant date, 168 shares vest each month on and after January 1, 2010 until March 1, 2012, and 297 shares vest each month on and after March 1, 2012.
(15) This option was originally granted on April 23, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 10,713 of the shares subject to the grant were vested as of re-grant date, and 236 shares vest each month on and after January 22, 2010.
(16) This option was originally granted on August 15, 2006 and was re-granted on December 23, 2009 as part of our option re-pricing. 25,356 of the shares subject to the grant were vested as of re-grant date, 714 shares vest each month on and after January 1, 2010 until March 1, 2010, and 595 shares vest each month on and after March 1, 2010.
(17) This option was originally granted on May 8, 2007 and was re-granted on December 23, 2009 as part of our option re-pricing. None of the shares subject to the grant were vested as of re-grant date, 19,625 shares vest February 1, 2010, and 438 shares vest each month thereafter.
(18) This option was originally granted on May 8, 2007 and was re-granted on December 23, 2009 as part of our option re-pricing. 11,911 of the shares subject to the grant were vested as of re-grant date, and 265 shares vest each month on and after January 22, 2010.
(19) This option was originally granted on September 27, 2006 and was re-granted on December 23, 2009 as part of our option re-pricing. 9,820 of the shares subject to the grant were vested as of re grant date, 358 shares vest each month on and after December 27, 2009 until October 27, 2010, and 297 shares vest each month on and after October 27, 2010.
(20) This option was originally granted on May 8, 2007 and was re-granted on December 23, 2009 as part of our option re-pricing. 36,446 of the shares subject to the grants were vested as of re-grant date, 16,858 shares vest as of February 1, 2010 and 1,185 shares vest each month thereafter.
(21) This option was originally granted on April 23, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. None of the shares subject to the grant were vested as of re-grant date, 18,750 shares vest on January 31, 2012, and 417 shares vest each month thereafter.
(22) This option was originally granted on April 23, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 10,713 of the shares subject to the grant were vested as of re-grant date and 238 shares vest each month on and after January 22, 2010.
(23) 25% of the shares subject to this option vest on the first anniversary of the grant date and 1/48th of the shares subject to the option vest every month thereafter.

Outstanding Equity Awards at Fiscal Year-End

The following table presents certain information concerning equity awards held by the Named Executive Officers at December 31, 2009.

Outstanding Equity Awards at Fiscal Year-End

	Option Awards			
Name	Number of Securities Underlying Unexercised Options (#) Exercisable(1)	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date
Gajus V. Worthington	57,142(2)	0	1.96	01/17/2015
	44,285(3)	0	2.57	05/08/2017
	14,285(5)	0	2.36	11/17/2019
	14,285(5)	0	2.36	11/17/2019
	20,000(15)	0	2.57	4/23/2018
	19,999(23)	0	2.57	4/23/2018
	4,500(6)	5,500(4)	2.36	11/17/2019
	6,100(7)	3,900(4)	2.36	11/17/2019
	0(30)	25,975(4)	2.36	11/17/2019
Vikram Jog	142,857(8)	0	2.57	2/6/2018
	14,285(9)	0	2.57	2/6/2018
	14,285(10)	0	2.57	2/6/2018
	10,000(6)	0	2.36	11/17/2009
	6,100(7)	3,900(4)	2.36	11/17/2009
Robert C. Jones	114,285(11)	0	1.96	08/03/2015
	22,856(12)	0	2.57	05/07/2017
	14,285(13)	0	2.57	4/23/2018
	14,285(24)	0	2.57	4/23/2018
	11,428(14)	0	2.57	4/23/2018
	20,000(15)	0	2.57	4/23/2018
	2,000(6)	8,000(4)	2.36	11/17/2019
	6,000(7)	4,000(4)	2.36	11/17/2019
William M. Smith	11,142(16)	0	1.05	12/04/2011
	50,000(17)	0	1.05	7/15/2013
	12,857(18)	0	1.40	4/18/2014
	28,571(19)	0	1.96	01/17/2015
	28,571(20)	0	2.57	08/14/2016
	21,008(21)	0	2.57	05/07/2017
	12,706(22)	0	2.57	05/07/2017
	20,000(15)	0	2.57	4/23/2018
	19,999(23)	0	2.57	4/23/2018
	14,285(13)	0	2.57	4/23/2018
	14,285(24)	0	2.57	4/23/2018
	9,000(6)	1,000(4)	2.36	11/17/2019
	6,100(7)	3,900(4)	2.36	11/17/2019
Mai Chan (Grace) Yow	42,857(25)	0	1.96	08/03/2015
	10,178(26)	4,107(4)	2.57	09/26/2016
	36,446(27)	20,411(4)	2.57	05/08/2017
	0(28)	20,000(4)	2.57	4/23/2018
	10,535(13)	3,750(4)	2.57	4/23/2018
	9,022(24)	5,263(4)	2.57	4/23/2018
	10,713(29)	715(4)	2.57	4/23/2018
	6,000(6)	4,000(4)	2.36	11/17/2019
	6,100(7)	3,900(4)	2.36	11/17/2019

(1) Unless otherwise noted, all option grants may be exercised pursuant to a restricted stock purchase agreement prior to vesting; any shares purchased prior to vesting are subject to a right of repurchase in our favor in the event the individual ceases to provide services to us for any reason which right lapses in accordance with the vesting schedule of the option.

(2) These options were granted on January 18, 2005 and vested over 4 years. 20% of the shares subject to the stock option vested one year after grant, 1.667% of the shares vested at the end of each monthly period during the subsequent year, and 2.5% of the shares vested at the end of each monthly period thereafter.
(3) This option was originally granted on May 8, 2007 and was re-granted on December 23, 2009 as part of our option re-pricing. 21,516 of the shares subject to this grant were vested as of re-grant date, 20,000 shares vest as of February 1, 2010, and 923 shares vest each month thereafter.
(4) This option may not be exercised prior to vesting.
(5) These options were granted on November 17, 2009. 11,071 shares subject to the options were vested as of the date of grant and 119 shares vest each month on after December 1, 2009.
(6) These options were granted on November 17, 2009 and are performance related options tied to achievement of 2009 departmental goals. The remaining unvested shares subject to these grants will vest on December 31, 2012.
(7) These options were granted on November 17, 2009 and are performance related grants tied to achievement of 2009 corporate goals. 6,100 of the unvested shares vested on December 31, 2009, 975 shares vested on April 1, 2010 and 81 shares vest at the end of each month thereafter.
(8) This option was originally granted on February 7, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 56,547 of the shares subject to the grants were vested as of re-grant date, and 2,977 shares vest each month on and after January 7, 2010.
(9) This option was originally granted on February 7, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 9,022 of the shares subject to the grants were vested as of re-grant date, 168 shares vest each month on and after January 1, 2010 until March 1, 1012, and 297 shares will vest each month on and after March 1, 2012.
(10) This option was originally granted on February 7, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 9,106 of the shares subject to this grant were vested as of re-grant date, 4,286 shares will vest on December 31, 2011 and 297 shares will vest each month thereafter.
(11) This option was granted on August 3, 2005 and vested over 4 years. Twenty-five percent of the shares vested one year after grant and 2.083% of the shares vested each month thereafter.
(12) This option was granted on May 8, 2007 and was re-granted on December 23, 2009 as part of our option re-pricing. 1,428 shares subject to this grant were vested as of the re-grant date, 19,999 shares vest as of February 1, 2010, and 477 shares vest each month thereafter.
(13) This option was originally granted on April 23, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 10,535 of the shares subject to the grant were vested as of re-grant date, 2,857 shares vest as of December 31, 2011, and 298 shares will vest each month thereafter.
(14) This option was originally granted on April 23, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 10,713 of the shares subject to the grant were vested as of re-grant date, and 236 shares vest each month on and after January 22, 2010.
(15) These options were originally granted on April 23, 2008 and were re-granted on December 23, 2009 as part of our option re-pricing. None of the shares subject to the grants were vested as of re-grant date, 18,750 shares vest as of December 31, 2011, and 417 shares vest each month thereafter.
(16) These stock options were granted on December 4, 2001 and vest over 4 years at the rate of 2.083% of the shares per month.
(17) These stock options were granted on July 16, 2003 and vested over 4 years at the rate of 2.083% of the shares per month.
(18) These stock options were granted on April 19, 2004 and vested over 4 years at the rate of 2.083% of the shares per month.
(19) These stock options were granted on January 18, 2005 and vested over 4 years. 20% of the shares subject to the stock option vested one year after grant. 1.667% of the shares vested each month during the subsequent year and 2.5% of the shares vested each month thereafter.
(20) This option was originally granted on August 15, 2006 and was re-granted on December 23, 2009 as part of our option re-pricing. 25,356 of the shares subject to the grant were vested as of re- grant date, 714 shares vest each month on and after January 1, 2010 until March 1, 2010, and 595 shares vest each month on and after March 1, 2010.
(21) This option was originally granted on May 8, 2007 and was re-granted on December 23, 2009 as part of our option re-pricing. None of the shares subject to the grant were vested as of re-grant date, 19,625 shares vest February 1, 2010, and 438 shares vest each month thereafter.
(22) This option was originally granted on May 8, 2007 and was re-granted on December 23, 2009 as part of our option re-pricing. 11,911 of the shares subject to the grant were vested as of re-grant date, and 265 shares vest each month on and after January 22, 2010.
(23) This option was originally granted on April 23, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 18,748 of the shares subject to the grant were vested as of re-grant date, and 417 shares vest each month on and after January 22, 2010.
(24) These options were originally granted on April 23, 2008 and were re-granted on December 23, 2009 as part of our option re-pricing. 9,022 of the shares subject to the grants were vested as of re-grant date, 168 shares vest each month on and after January 1, 2010 until March 1, 2012, and 297 shares vest each month on and after March 1, 2012.
(25) This stock option was granted on August 3, 2005 and vested over 4 years with 25% of the shares subject to the grant vesting one year after the date of grant and 1/48th of the shares vesting each month thereafter.
(26) This option was originally granted on September 27, 2006 and was re-granted on December 23, 2009 as part of our option re-pricing. 9,820 of the shares subject to the grant were vested as of re grant date, 358 shares vest each month on and after December 27, 2009 until October 27, 2010, and 297 shares vest each month on and after October 27, 2010.
(27) This option was originally granted on May 8, 2007 and was re-granted on December 23, 2009 as part of our option re-pricing. 36,446 of the shares subject to the grants were vested as of re- grant date, 16,858 shares vest as of February 1, 2010 and 1,185 shares vest each month thereafter.

(28) This option was originally granted on April 23, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. None of the shares subject to the grant were vested as of re- grant date, 18,750 shares vest on January 31, 2012, and 417 shares vest each month thereafter.
(29) This option was originally granted on April 23, 2008 and was re-granted on December 23, 2009 as part of our option re-pricing. 10,713 of the shares subject to the grant were vested as of re-grant date and 238 shares vest each month on and after January 22, 2010.
(30) 25% of the shares subject to this option vest on November 17, 2010 and 1/48th of the shares subject to the option vest every month thereafter.

Repricing of Outstanding Stock Options

In November 2009, we offered eligible holders of our stock options, including our executive officers and all our employees, the opportunity to exchange certain outstanding options for new options with an exercise price equal to the fair value of our common stock on December 23, 2009, the date on which this exchange offer ended. Options eligible for exchange included all options with an exercise price greater than $2.36 per share that remained outstanding and unexercised on December 23, 2009. We determined that the fair market value of our stock on December 23, 2009 was $2.57. The new options issued in this exchange were exercisable for the same number of shares as the old options and were subject to the same terms and conditions, except that the vesting period for the new options was extended by three months. Approximately 1,385,000 options were exchanged including 629,130 held by our directors and executive officers. We made this exchange offer because many of the outstanding options held by our employees had exercise prices significantly above the fair value of our common stock, and we believed that such options provided little incentive to employees. Our executive officers were entitled to participate in the exchange offer on the same basis as other employees because we intend for options to be an important form of incentive compensation for our executive officers.

Employment Agreements and Offer Letters

Fredric Walder. We are party to an offer letter dated May 3, 2010, with Fredric Walder, our Chief Business Officer. Under this offer letter, we employ Mr. Walder on an at-will basis for no specified term and agree to pay him an annual base salary of $290,000, which continues to be his base salary. We have also agreed to provide him with up to $105,000 in relocation benefits. Pursuant to the offer letter, we granted him an option to purchase 200,000 shares of our common stock with an exercise price of $2.57, per share, the fair value of our common stock on the date of grant. 1/4 of the shares subject to this grant vest one year after the date of his commencement of employment with us and 1/48th of the shares vest at the end of each month thereafter subject to Mr. Walder's continued employment with us at each applicable vesting date. Mr. Walder is also eligible to participate in our executive bonus plan and receive the same benefits upon termination or change of control as our other executive officers.

Potential Payments Upon Termination or Change of Control

In February 2008, we entered into employment and severance agreements with Gajus V. Worthington, William M. Smith, Mai Chan (Grace) Yow, Robert C. Jones and Vikram Jog, which require us to make payments if the named executive officer's employment with us is terminated in certain circumstances.

Pursuant to our employment and severance agreements with our named executive officers, a "change of control" is defined as the occurrence of the following events:

- any "person," as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended, is or becomes the "beneficial owner," as such term is defined in Rule 13d-3 under said Act, directly or indirectly, of our securities representing 50% or more of the total voting power represented by our then outstanding voting securities;
- a change in the composition of our board occurring within a two-year period, as a result of which fewer than a majority of our directors are "incumbent directors," which term is defined as either (i) our directors as of the execution date of the relevant agreement or (ii) directors who are elected, or

nominated for election, to our board with the affirmative votes of at least a majority of the incumbent directors at the time of such election or nomination (but will not include an individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of our directors);

- the date of the consummation of our merger or consolidation with any other corporation that has been approved by the our stockholders, other than a merger or consolidation that would result in our voting securities outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 50% of the total voting power represented by our voting securities or such surviving entity outstanding immediately after such merger or consolidation, or our stockholders approve a plan of our complete liquidation; or
- the date of the consummation of the sale or disposition by us of all or substantially all of our assets.

Pursuant to our employment and severance agreements with our named executive officers, "cause" is defined as:

- an act of dishonesty in connection with a named executive officer's responsibilities as an employee;
- a conviction of, or plea of nolo contendere to, a felony or any crime involving fraud, embezzlement or any other act of moral turpitude;
- gross misconduct;
- an unauthorized use or disclosure of any of our proprietary information or of any other party to whom he or she owes an obligation of nondisclosure as a result of his or her relationship with us;
- a willful breach of any obligations under any written agreement or covenant with us; or
- a named executive officer's continued failure to perform his or her employment duties after he or she has received a written demand of performance from us and has failed to cure such non-performance to our satisfaction within 10 business days after receiving such notice.

Pursuant to our employment and severance agreements with Gajus V. Worthington, William M. Smith, Robert C. Jones and Vikram Jog, "good reason" means the occurrence of one or more of the following events effected without the named executive officer's prior consent, provided that he or she terminates his or her employment within one year thereafter:

- the assignment to the named executive officer of any duties or a reduction of the named executive officer's duties, either of which significantly reduces his or her responsibilities; provided that the continuance of his or her responsibilities at the subsidiary or divisional level following a change of control, rather than at the parent, combined or surviving company level following such change of control shall not be deemed "good reason" within the meaning of this clause;
- a material reduction of the named executive officer's base salary;
- the relocation of the named executive officer to a facility or a location greater than 50 miles from his or her present location;
- a material breach by us of any material provision of the employment and severance agreement.

However, no act or omission by us shall constitute "good reason" if we fully cure that act or omission within 30 days of receiving notice from the named executive officer.

Pursuant to our employment and severance agreement with Mai Chan (Grace) Yow, "good reason" means the occurrence of one or more of the following events effected without her consent, provided that she terminates her employment within one year thereafter:

- the assignment to Ms. Yow of any duties or a reduction of her duties, either of which significantly reduces her responsibilities; provided that the continuance of her responsibilities at the subsidiary or

divisional level following a change of control, rather than at the parent, combined or surviving company level following such change of control shall not be deemed "good reason" within the meaning of this clause;

- a material reduction of Ms. Yow's base salary;
- the relocation of Ms. Yow to a facility or a location outside the country of Singapore;
- a material breach by us of any material provision of the employment and severance agreement.

However, no act or omission by us shall constitute "good reason" if we fully cure that act or omission within 30 days of receiving notice from the named executive officer.

The employment and severance agreements provide that in the event the named executive officer's employment is terminated by us or our successor without "cause" prior to a "change of control" or after 12 months following a "change of control" and the named executive officer executes a standard release of claims with us, the named executive officer is entitled to receive, in addition to such officer's salary payable through the date of termination of employment and any other benefits earned and owed through the date of termination, the following cash payments:

- an amount, payable in accordance with our customary payroll practices, equal to six months of the named executive officer's base salary in effect immediately prior to the time of termination; and
- reimbursement of costs and expenses incurred by the executive officer and his or her eligible dependents for coverage under group health plans, policies or arrangements sponsored by us for a period of up to six months, provided that such coverage is timely elected under COBRA or similar applicable state statute.

The employment and severance agreements further provide that in the event the named executive officer's employment is terminated (i) by us or our successor without "cause" and within 12 months following a "change of control" or (ii) by the executive officer for "good reason" and within 12 months following a "change of control", and in each case the named executive officer executes a standard release of claims with us, the executive officer is entitled to receive, in addition to such officer's salary payable through the date of termination of employment and any other benefits earned and owed through the date of termination, the following cash payments and benefits:

- an amount, payable in a lump sum, equal to the greater of (i) six months of the named executive officer's base salary in effect immediately prior to the change in control or (ii) six months of the named executive's officer's base salary in effect immediately prior to the time of termination;
- all outstanding unvested stock options, equity appreciation rights or similar equity awards then held by the named executive officer as of the date of termination will immediately vest and become exercisable as to all shares underlying such options;
- any shares of restricted stock, restricted stock units and similar equity awards then held by the named executive officer will immediately vest and any of our rights of repurchase or reacquisition with respect to such shares will lapse as to all shares; and
- reimbursement of costs and expenses incurred by the executive officer and his or her eligible dependents for coverage under group health plans, policies or arrangements sponsored by us for a period of up to six months, provided that such coverage is timely elected under COBRA or similar applicable state statute.

The following table describes the payments and benefits that each of our named executive officers would be entitled to receive pursuant to the employment and severance agreements, assuming that each of the following triggers occurred in December 31, 2009: (i) their employment was terminated without "cause" prior to or after 12 months following a "change of control" and (ii) their employment was terminated without "cause" or by them for "good reason" within 12 months following a "change of control".

	Employment Terminated without Cause Prior to or After 12 Months Following Change of Control		Employment Terminated within 12 Months Following Change of Control(1)		
Name and Principal Position	Severance Payments ($)(2)	Health Care Benefits ($)(3)	Equity Acceleration ($)(4)	Severance Payments ($)(2)	Health Care Benefits ($)(3)
Gajus V. Worthington President and Chief Executive Officer	147,420	12,327		147,420	12,327
Vikram Jog Chief Financial Officer	139,000	12,327		139,000	12,327
William M. Smith Vice President, Legal Affairs and General Counsel	137,800	10,737		132,500	10,737
Mai Chan (Grace) Yow Vice President, Worldwide Manufacturing and Managing Director of Fluidigm Singapore	113,427(5)	540		113,427(5)	540
Robert C. Jones Executive Vice President, Research and Development	137,800	12,327		137,800	12,327

(1) Includes involuntary termination other than for cause, death or disability, and voluntary termination by the employee for good reason.
(2) The amounts shown in this column are equal to six months of the named executive officer's base salary as of December 31, 2009.
(3) The amounts shown in this column are equal to the cost of covering the named executive officer and his or her eligible dependents coverage under our benefit plans for a period of six months, assuming that such coverage is timely elected under COBRA or its, for Ms. Yow, the equivalent provision of Singapore Law.
(4) The amounts shown in this column are equal to the spread value between (i) the unvested portion of all outstanding stock options, equity appreciation rights or similar equity awards held by the named executive officer on December 31, 2009 and (ii) the initial public offering price of our common stock, which we have assumed to be the midpoint of the price range set forth on the cover page of this prospectus.
(5) Amount shown has been converted from Singapore dollars to U.S. dollars using the exchange rate as of December 31, 2009.

In addition to the benefits described above, our 2009 Equity Incentive Plan and 1999 Stock Option Plan provide for full acceleration of all outstanding options in the event of a change of control of our company where the successor company does not assume our outstanding options and other awards in connection with such acquisition transaction. We estimate the value of this benefit for each named executive officer to be equal to the amount listed above in the column labeled "Equity Acceleration."

Employee Benefit Plans

2011 Equity Incentive Plan.

Our Board of Directors adopted our 2011 Equity Incentive Plan on , and we expect our stockholders will approve it prior to the completion of this offering. Subject to stockholder approval, the 2011 Equity Incentive Plan will be effective upon completion of this offering. Our 2011 Equity Incentive Plan provides for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, to our employees and any parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares to our employees, directors and consultants and our parent and subsidiary corporations' employees and consultants.

A total of shares of our common stock are reserved for issuance pursuant to the 2011 Equity Incentive Plan, of which no options are issued and outstanding. In addition, the shares reserved for issuance under our 2011 Equity Incentive Plan will also include (a) those shares reserved but unissued under the 1999 Stock Option Plan and the 2009 Equity Incentive Plan as of the effective date of the first registration statement filed by us and declared effective with respect to any class of our securities and (b) shares returned to the 1999 Stock Option Plan and the 2009 Equity Incentive Plan as the result of expiration or termination of options (provided that the maximum number of shares that may be added to the 2011 Equity Incentive Plan pursuant to (a) and (b) is shares). The number of shares available for issuance under the 2011 Equity Incentive Plan will also include an annual increase on the first day of each fiscal year beginning in 2012, equal to the least of:

- shares;
- % of the outstanding shares of common stock as of the last day of our immediately preceding fiscal year; or
- such other amount as our Board of Directors may determine.

Our Board of Directors or a committee appointed by our board administers our 2011 Equity Incentive Plan. Our compensation committee will administer our 2011 Equity Incentive Plan after the completion of the offering. In the case of awards intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Internal Revenue Code, the committee will consist of two or more "outside directors" within the meaning of Section 162(m).

Subject to the provisions of our 2011 Equity Incentive Plan, the administrator has the power to determine the terms of the awards, including the exercise price, the number of shares subject to each such award, the exercisability of the awards and the form of consideration, if any, payable upon exercise. The administrator also has the authority to amend existing awards to reduce their exercise price, to allow participants the opportunity to transfer outstanding awards to a financial institution or other person or entity selected by the administrator and to institute an exchange program by which outstanding awards may be surrendered in exchange for awards with a higher or lower exercise price.

The exercise price of options granted under our 2011 Equity Incentive Plan must at least be equal to the fair market value of our common stock on the date of grant. The term of an incentive stock option may not exceed 10 years, except that with respect to any participant who owns 10% of the voting power of all classes of our outstanding stock, the term must not exceed 5 years and the exercise price must equal at least 110% of the fair market value on the grant date. Subject to the provisions of our 2011 Equity Incentive Plan, the administrator determines the term of all other options.

After the termination of service of an employee, director or consultant, he or she may exercise his or her option for the period of time stated in his or her option agreement. Generally, if termination is due to death or disability, the option will remain exercisable for 12 months. In all other cases, the option will generally remain exercisable for three months following the termination of service. However, in no event may an option be exercised later than the expiration of its term.

Stock appreciation rights may be granted under our 2011 Equity Incentive Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our common stock between the exercise date and the date of grant. Subject to the provisions of our 2011 Equity Incentive Plan, the administrator determines the terms of stock appreciation rights, including when such rights become exercisable and whether to pay any increased appreciation in cash or with shares of our common stock, or a combination thereof, except that the per share exercise price for the shares to be issued pursuant to the exercise of a stock appreciation right will be no less than 100% of the fair market value per share on the date of grant.

Restricted stock may be granted under our 2011 Equity Incentive Plan. Restricted stock awards are grants of shares of our common stock that vest in accordance with terms and conditions established by the administrator.

The administrator will determine the number of shares of restricted stock granted to any employee, director or consultant. The administrator may impose whatever conditions to vesting it determines to be appropriate (for example, the administrator may set restrictions based on the achievement of specific performance goals or continued service to us); provided, however, that the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Shares of restricted stock that do not vest are subject to our right of repurchase or forfeiture.

Restricted stock units may be granted under our 2011 Equity Incentive Plan. Restricted stock units are bookkeeping entries representing an amount equal to the fair market value of one share of our common stock. The administrator determines the terms and conditions of restricted stock units including the vesting criteria (which may include accomplishing specified performance criteria or continued service to us) and the form and timing of payment. Notwithstanding the foregoing, the administrator, in its sole discretion may accelerate the time at which any restrictions will lapse or be removed.

Performance units and performance shares may be granted under our 2011 Equity Incentive Plan. Performance units and performance shares are awards that will result in a payment to a participant only if performance goals established by the administrator are achieved or the awards otherwise vest. The administrator will establish organizational or individual performance goals in its discretion, which, depending on the extent to which they are met, will determine the number and/or the value of performance units and performance shares to be paid out to participants. After the grant of a performance unit or performance share, the administrator, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such performance units or performance shares. Performance units shall have an initial dollar value established by the administrator prior to the grant date. Performance shares shall have an initial value equal to the fair market value of our common stock on the grant date. The administrator, in its sole discretion, may pay earned performance units or performance shares in the form of cash, in shares or in some combination thereof.

Our 2011 Equity Incentive Plan provides that all non-employee directors will be eligible to receive all types of awards (except for incentive stock options) under the 2011 Equity Incentive Plan. Please see the description of our outside director equity compensation policy above under “Director Compensation—Post Offering.”

Unless the administrator provides otherwise, our 2011 Equity Incentive Plan generally does not allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime.

Our 2011 Equity Incentive Plan provides that in the event of a merger or “change in control,” as defined in the 2011 Equity Incentive Plan, each outstanding award will be treated as the administrator determines, including that the successor corporation or its parent or subsidiary will assume or substitute an equivalent award for each outstanding award. The administrator is not required to treat all awards similarly. If there is no assumption or substitution of outstanding awards, the awards will fully vest, all restrictions will lapse, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and the awards will become fully exercisable. The administrator will provide notice to the recipient that he or she has the right to exercise the option and stock appreciation right as to all of the shares subject to the award, all restrictions on restricted stock will lapse, and all performance goals or other vesting requirements

2009 Equity Incentive Plan, as Amended

Our 2009 Equity Incentive Plan was adopted by our Board of Directors on April 30, 2009 and approved by our stockholders on August 14, 2009, and subsequently amended on November 13, 2009. Our 2009 Equity Incentive Plan provides for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, to our employees and any parent and subsidiary corporations’ employees, and for the grant of nonstatutory stock options, stock appreciation rights, restricted stock, and restricted stock units to our employees, directors and consultants and our parent and subsidiary corporations’ employees and consultants. Our Board of Directors has decided not to grant any additional options under our 2009 Equity Incentive Plan upon the completion of this offering. However, our 2009 Equity Incentive Plan will continue to govern the terms and conditions of the outstanding stock options previously granted thereunder.

Subject to the provisions of our 2009 Equity Incentive Plan, the maximum aggregate number of shares which may be subject to options and sold under our 2009 Equity Incentive Plan is 1,746,478 shares, plus 2,935,234 shares that were subject to stock options or similar awards granted under the 1999 Stock Option Plan that expired or terminated without having been exercised in full and unvested shares issued pursuant to awards granted under the 1999 Stock Option Plan that were forfeited to or repurchased by us.

Shares issued pursuant to awards under the 2009 Equity Incentive Plan that we repurchase or that expire or are forfeited, as well as shares used to pay the exercise price of an award or to satisfy the tax withholding obligations related to an award, will become available for future grant under the 2009 Equity Incentive Plan. In addition, to the extent that an award is paid out in cash rather than shares, such cash payment will not reduce the number of shares available for issuance under the 2009 Equity Incentive Plan.

Our compensation committee appointed by our board of directors currently administers our 2009 Equity Incentive Plan. Under our 2009 Equity Incentive Plan, the administrator has the power to determine the terms of awards, including the recipients, the exercise price, if any, the number of shares covering each award, the fair market value of a share of our common stock, the vesting schedule applicable to the awards, together with any vesting acceleration, the form of consideration, if any, payable upon exercise of the award, and the terms of the award agreement for use under the 2009 Equity Incentive Plan. The administrator also has the authority, subject to the terms of the 2009 Equity Incentive Plan, to amend existing awards to reduce or increase their exercise price, to allow participants the opportunity to transfer outstanding awards to a financial institution or other person or entity selected by the administrator, to institute an exchange program by which outstanding awards may be surrendered in exchange for awards that may have different exercise prices and terms, to prescribe rules and to construe and interpret the 2009 Equity Incentive Plan and awards granted under the 2009 Equity Incentive Plan.

The administrator may grant incentive and/or nonstatutory stock options under our 2009 Equity Incentive Plan, provided that incentive stock options are only granted to employees. The exercise price of such options must equal at least the fair market value of our common stock on the date of grant. The term of an incentive stock option may not exceed ten years; provided, however, that an incentive stock option held by a participant who owns more than 10% of the total combined voting power of all classes of our stock, or of certain of our parent or subsidiary corporations, may not have a term in excess of five years and must have an exercise price of at least 110% of the fair market value of our common stock on the grant date. The administrator will determine the methods of payment of the exercise price of an option, which may include cash, shares or other property acceptable to the administrator. Subject to the provisions of our 2009 Plan, the administrator determines the remaining terms of the options (e.g., vesting). After the termination of service of an employee, director or consultant, the participant may exercise his or her option, to the extent vested as of such date of termination, for the period of time stated in his or her award agreement. However, in no event may an option be exercised later than the expiration of its term. The specific terms will be set forth in an award agreement.

After the termination of service of an employee, director or consultant, he or she may exercise his or her option for the period of time stated in his or her option agreement. Generally, if termination is due to death or disability, the option will remain exercisable for 6 months. In all other cases, the option will generally remain exercisable for 30 days following the termination of service. In some cases, options issued to consultants pursuant to our 2009 Equity Incentive Plan provide that they may be exercised at anytime prior to the expiration of the ten year term of the option. However, in no event may an option be exercised later than the expiration of its term.

Stock appreciation rights may be granted under our 2009 Equity Incentive Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our common stock between the exercise date and the date of grant. Subject to the provisions of our 2009 Equity Incentive Plan, the administrator determines the terms of stock appreciation rights, including when such rights vest and become exercisable and whether to settle such awards in cash or with shares of our common stock, or a combination thereof, except that the per share exercise price for the shares to be issued pursuant to the exercise of a stock appreciation right will be no less than 100% of the fair market value per share on the date of grant. The specific terms will be set forth in an award agreement.

Restricted stock may be granted under our 2009 Equity Incentive Plan. Restricted stock awards are grants of shares of our common stock that are subject to various restrictions, including restrictions on transferability and forfeiture provisions. Shares of restricted stock will vest and the restrictions on such shares will lapse, in accordance with terms and conditions established by the administrator. The administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Recipients of restricted stock awards generally will have voting and dividend rights with respect to such shares upon grant without regard to vesting, unless the administrator provides otherwise. Shares of restricted stock that do not vest for any reason will be forfeited by the recipient and will revert to us. The specific terms will be set forth in an award agreement.

Restricted stock units may be granted under our 2009 Equity Incentive Plan. Each restricted stock unit granted is a bookkeeping entry representing an amount equal to the fair market value of one share of our common stock. The administrator determines the terms and conditions of restricted stock units including the vesting criteria, which may include achievement of specified performance criteria or continued service to us, and the form and timing of payment. The administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout. The administrator determines in its sole discretion whether an award will be settled in stock, cash or a combination of both. The specific terms will be set forth in an award agreement.

Unless the administrator provides otherwise, our 2009 Equity Incentive Plan generally does not allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime.

In the event of certain changes in our capitalization, to prevent diminution or enlargement of the benefits or potential benefits available under the 2009 Equity Incentive Plan, the administrator will make adjustments to one or more of the number and class of shares that may be delivered under the plan and/or the number, class and price of shares covered by each outstanding award. In the event of our proposed liquidation or dissolution, the administrator will notify participants as soon as practicable and all awards will terminate immediately prior to the consummation of such proposed transaction.

Our 2009 Equity Incentive Plan provides that in the event of a merger or change in control, as defined under the 2009 Equity Incentive Plan, each outstanding award will be treated as the administrator determines, except that if a successor corporation or its parent or subsidiary does not assume or substitute an equivalent award for any outstanding award, then such award will fully vest, all restrictions on such award will lapse, all performance goals or other vesting criteria applicable to such award will be deemed achieved at 100% of target levels and such award will become fully exercisable, if applicable, for a specified period prior to the transaction. The award will then terminate upon the expiration of the specified period of time.

Our board of directors has the authority to amend, alter, suspend or terminate the 2009 Equity Incentive Plan provided such action does not impair the existing rights of any participant. Our 2009 Equity Incentive Plan will automatically terminate in 2019, unless we terminate it sooner.

1999 Stock Option Plan

Our 1999 Stock Option Plan was adopted by our board of directors and approved by our stockholders on May 12, 1999. The 1999 Stock Option Plan was terminated on April 30, 2009. Following the termination of our 1999 Stock Option Plan, we did not grant any additional awards under the 1999 Stock Option Plan, but the 1999 Stock Option Plan will continue to govern the terms and conditions of the outstanding awards previously granted thereunder.

Our 1999 Stock Option Plan provided for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, to our employees and any parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options to our employees, directors and consultants and our parent and subsidiary corporations' employees and consultants.

Subject to the provisions of our 1999 Stock Option Plan, the maximum aggregate number of shares issuable under our 1999 Stock Option Plan was 4,228,571 shares. As of September 30, 2010, options to purchase 741,269 shares of our common stock were outstanding under the 1999 Stock Option Plan. If an option expires or becomes unexercisable without having been exercised in full or is surrendered pursuant to an option exchange program, such shares will become available for future grant or sale.

Our compensation committee appointed by our board of directors currently administers our 1999 Stock Option Plan. Under our 1999 Stock Option Plan, the administrator has the power to determine the terms of the stock options, including the employees, directors and consultants who will receive stock options, the number of shares subject to each stock option, the vesting schedule, any vesting acceleration, and the exercisability of stock options. The administrator also has the authority to initiate an option exchange program whereby stock options are exchanged for stock options with a lower exercise price. The administrator may also reduce the exercise price of any option to the then current fair market value if the fair market value of our common stock has declined since the date the option was granted.

The exercise price of options granted under our 1999 Stock Option Plan had to be at least equal to the fair market value of our common stock on the date of grant. The term of an incentive stock option had to not exceed 10 years, except that with respect to any optionee who owned 10% of the voting power of all classes of our outstanding stock as of the grant date, the term could not exceed 5 years and the exercise price had to equal at least 110% of the fair market value on the grant date. Subject to the provisions of our 1999 Stock Option Plan, the administrator determined the terms of all other options in its discretion.

After the termination of service of an employee, director or consultant, he or she may exercise his or her option for the period of time stated in his or her option agreement. Generally, if termination is due to death or disability, the option will remain exercisable for 12 months. In all other cases, the option will generally remain exercisable for three months following the termination of service. In some cases, options issued to consultants pursuant to our 1999 Stock Option Plan provide that they may be exercised at anytime prior to the expiration of the ten year term of the option. However, in no event may an option be exercised later than the expiration of its term.

Unless the administrator provides otherwise, our 1999 Stock Option Plan generally does not allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime.

Our 1999 Stock Option Plan provides that in the event of a merger of our company or a sale of substantially all of our assets, each outstanding stock option will be assumed or an equivalent option or right substituted by the successor corporation. If there is no assumption or substitution of outstanding options (or portions thereof), the options (or portions thereof) will fully vest and become fully exercisable. In such case, the administrator will provide notice to the optionee that he or she has the right to exercise the option as to all of the shares subject to the option for a period of at least 15 days. The option will terminate upon the expiration of the period of time the administrator provides in the notice.

Our board of directors has the authority to amend, suspend or terminate the 1999 Stock Option Plan provided such action does not impair the rights of any optionee without his or her written consent.

Retirement Plans

401(k) Plan. We maintain a tax-qualified retirement plan that provides eligible employees with an opportunity to save for retirement on a tax advantaged basis. Eligible employees are able to participate in the 401(k) plan as of the first day of the month on or following the date they begin employment and participants are able to defer up to 60% of their eligible compensation subject to applicable annual Internal Revenue Code limits. All participants' interests in their deferrals are 100% vested when contributed. The 401(k) plan permits us to make matching contributions and profit sharing contributions to eligible participants, although we have not made

any such contributions to date. Pre-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. The 401(k) plan is intended to qualify under Sections 401(a) and 501(a) of the Internal Revenue Code. As a tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan and all contributions are deductible by us when made.

Limitation on Liability and Indemnification Matters

Our amended and restated certificate of incorporation and bylaws that will become effective upon the completion of this offering contain provisions that limit the personal liability of our directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- any transaction from which the director derived an improper personal benefit.

Our amended and restated certificate of incorporation that will become effective upon the completion of this offering, provides that we indemnify our directors to the fullest extent permitted by Delaware law. In addition, our amended and restated bylaws, that will become effective upon the completion of this offering, provide that we indemnify our directors and officers to the fullest extent permitted by Delaware law. Our amended and restated bylaws, that will become effective upon the completion of this offering, also provide that we shall advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity, regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by the Board of Directors. With certain exceptions, these agreements provide for indemnification for related expenses including, among others, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and bylaws, that will become effective upon the completion of this offering, may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty of care. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers. At present, there is no pending litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought, and we are not aware of any threatened litigation that may result in claims for indemnification.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

In addition to the director and executive compensation arrangements discussed above in "Management," we have been a party to the following transactions since January 1, 2007, in which the amount involved exceeded or will exceed $120,000, and in which any director, executive officer or holder of more than 5% of any class of our voting stock, or any member of the immediate family of or entities affiliated with any of them, had or will have a material interest.

Warrant Repricing

In August 2010, we allowed the holders of outstanding preferred stock warrants with exercise prices greater than $7.00 per share to amend such warrants to provide that (i) the exercise price of such warrants would be $7.00 per share and (ii) such warrants would be exercisable for (a) a number of shares of an alternative series of our preferred stock equal to the number of shares of the preferred stock issuable upon exercise of the non-repriced warrants and (b) an equivalent number of shares of our common stock, subject to such holder's agreement to exercise the amended warrants immediately in full and for cash.

The table below sets forth the participation in the Warrant Repricing by our directors, executive officers and 5% stockholders and their affiliates.

Purchasers	Number of shares of Warrants Repriced	Number of shares of new preferred stock issued in connection with Warrant Repricing	Number of shares of common stock issued in connection with Warrant Repricing
Entities affiliated with Alloy Funds(1)	24,181	24,181	24,181
Entities affiliated with Fidelity Funds(2)	31,556	31,556	31,556
Entities affiliated with InterWest Funds(3)	24,468	24,468	24,468
Total	80,205	80,205	80,205

(1) Consists of 317 shares issued to Alloy Partners 2002, L.P., 11,773 shares issued to Alloy Ventures 2002, L.P. and 12,091 shares issued to Alloy Ventures 2005, L.P.
(2) Consists of 3,117 shares issued to Fidelity Contrafund: Fidelity Advisor New Insights Fund and 28,439 shares issued to Fidelity Contrafund: Fidelity Contrafund.
(3) Consists of 1,118 shares issued to InterWest Investors VII, L.P. and 23,350 shares issued to InterWest Partners VII, L.P.

2009 Bridge Financing and Issuance of Series E Convertible Preferred Stock

In August 2009, we sold convertible promissory notes, or the 2009 Notes, to certain of our existing investors for an aggregate purchase price of $10.7 million. The 2009 Notes (a) accrued interest (i) during the first 60 days the 2009 Notes were outstanding, at a rate equal to 1% per month, and (ii) following such initial 60 day period, at a rate equal to 2% per month, in each case compounded monthly and computed on the basis of the actual number of days elapsed and a year consisting of twelve (12) 30-day months; and (b) had a maturity date of approximately 4 months.

Under the terms of the 2009 bridge financing, upon the closing of a qualified equity financing or upon the election of the holders of a majority of the 2009 Notes, the 2009 Notes and the interest accrued thereon would automatically convert into the security sold in such financing at the price at which such securities were sold. In November 2009, in connection with our Series E convertible preferred stock financing with a strategic investor, a majority of the investors who had purchased 2009 Notes elected to have their 2009 Notes convert into Series E convertible preferred stock at a conversion price of $14.00 per share. Each investor who purchased 2009 Notes also received warrants to purchase a number of shares of our Series E convertible preferred stock equal to the product of 50% of the principal amount of 2009 Notes purchased by such investor plus an additional 5% of the original principal amount of the 2009 Notes for each full month that elapsed after the date that was two

(2) months after the issuance date of the 2009 Notes, for so long as the 2009 Notes remained outstanding or converted into equity securities of the Company under the 2009 Notes, provided, however, that in no event will the additional coverage exceed 15% of the original principal amount of the 2009 Note.

In connection with these sales, we granted the purchasers certain registration rights with respect to their securities. See "Description of Capital Stock—Registration Rights." Each outstanding share of our preferred stock will be converted automatically into one share of our common stock upon the completion of this offering.

The table below summarizes (i) the amount invested by each of our directors, executive officers, holders of more than 5% of any class of our voting securities, or any member of the immediate family of or any entities affiliated with any of the foregoing persons in the 2009 bridge financing, (ii) the number of shares of Series E Preferred Stock received by each such person upon conversion of their 2009 Note, and (iii) the number of shares of Series E Preferred Stock for which the warrants issued to such persons are now exercisable.

Purchaser	Aggregate Purchase Price	Shares of Series E Preferred Stock	Number of Shares of Series E Preferred stock issuable upon exercise of Warrants
Entities affiliated with Alloy Funds(1)	$ 677,172	50,026	24,181
Bruce Burrows(2)	$ 652,619	48,213	23,305
Entities affiliated with EuclidSR Funds(3)	$ 888,762	65,658	31,738
Biomedical Sciences Investment Fund Pte Ltd(4)	$1,634,383	120,743	58,364
Entities affiliated with InterWest Funds(5)	$ 685,191	50,619	24,468
Entities affiliated with Lehman Brothers Holdings, Inc.(6)	$ 670,137	49,506	23,930
SMALLCAP World Fund, Inc. (7)	$ 794,372	58,685	28,367
Entities affiliated with Versant Ventures (8)	$1,066,728	78,806	38,092
Entities affiliated with Fidelity Funds (9)	$1,133,858	83,764	40,489
Total	$6,002,835	443,450	214,353

(1) Consists of $8,901 invested by Alloy Partners 2002, L.P. and $329,685 shares purchased by Alloy Ventures 2002, L.P. and $338,586 invested by Alloy Ventures 2005 L.P. Michael Hunkapiller, an affiliate of Alloy Ventures, was a member of our Board of Directors.
(2) Bruce Burrows is a holder of 5% or more of our capital stock. He served as a member of our Board of Directors from January 3, 2000 to January 15, 2008.
(3) Consists of $444,381 invested by EuclidSR Biotechnology Partners, L.P. and $444,381 invested by EuclidSR Partners, L.P. Raymond Whitaker, an affiliate of Euclid SR Partners, is a member of our Board of Directors.
(4) Biomedical Sciences Investment Fund Pte Ltd is a holder of 5% or more of our capital stock. Jeremy Loh, an affiliate of Biomedial Sciences Investment Fund Pte Ltd is a member of our Board of Directors.
(5) Consists of $653,880 invest by InterWest Investors VII, L.P. and $31,312 invested by InterWest Partners VII, L.P. These affiliated entities collectively hold 5% or more of our capital stock.
(6) Consists of $167,534 invested by Lehman Brothers Healthcare Venture Capital L.P., invested by $37,468 by Lehman Brothers Offshore Partnership Account 2000/2001, L.P., $320,662 invested by Lehman Brothers P.A., LLC, and $144,473 invested by Lehman Brothers Partnership Account 2001/2001, L.P. These affiliated collectively hold 5% or more of our capital stock.
(7) SMALLCAP World Fund, Inc. is a holder of 5% or more of our capital stock.
(8) Consists of $17,898 invested by Versant Affiliates Fund 1-A, L.P., invested $52,818 by Versant Affiliates Fund 1-B, L.P., $20,345 invested by Versant Side Fund I, L.P. and invested $975,666 by Versant Venture Capital I, L.P. Sam Colella, an affiliate of Versant Ventures, is a member of our Board of Directors.
(9) Consists $87,292 invested by Fidelity Contrafund: Fidelity Advisor New Insights Fund, $796,398 invested by Fidelity Contrafund: Fidelity Contrafund, and $250,168 by Variable Insurance Products Fund II: Contrafund Portfolio.

Transactions with the Singapore Government

Government Incentive Grants

In October 2005, Fluidigm Singapore entered into a letter agreement providing for up to SG$10 million (approximately US$7.6 million using a September 30, 2010 exchange rate) in incentive grants from the

Singapore Economic Development Board, or EDB. The incentive grants are payable for the period August 1, 2005 through July 31, 2010 in connection with the establishment and operation of a research, development and manufacturing center for chips in Singapore. Incentive grant payments are calculated as a portion of qualifying expenses we incur in Singapore relating to salaries, overhead, outsourcing and subcontracting expenses, operating expenses and royalties paid. Fluidigm Singapore is required to submit requests for incentive grant payments on a quarterly basis along with reports regarding its compliance with the development, hiring, expenditure and other conditions through the end of the applicable quarter.

On January 11, 2006, Fluidigm Singapore and EDB entered into a supplement to the October 2005 letter agreement. This supplement was entered into to create a process whereby Fluidigm Singapore and EDB would agree on new quarterly development targets at the start of each year, Fluidigm Singapore would submit to EDB a progress report and evidence of the achievement of targets on a quarterly basis and the parties would resolve any disagreements regarding the satisfaction of targets using an established procedure and the parties would be entitled to obtain a third party audit of our incentive grant payment requests on a semi-annual rather than an annual basis.

Fluidigm Singapore's continued eligibility for such incentive grant payments is subject to its compliance with increasing levels of research, development and manufacturing activity in Singapore, including employment of specified numbers of research scientists and engineers, its incurrence of specified levels of research and development expenses in Singapore over the course of each calendar year, its use of local service providers, its manufacture in Singapore of the products developed in Singapore and its achievement of certain targets relating to new product development or completion of specific manufacturing process objectives. These required levels of research, development and manufacturing activity in Singapore and the associated increases from one year to the next are the result of negotiations between the parties and are generally consistent with our business strategy for our Singapore operations. All ownership rights in the intellectual property developed by Fluidigm Singapore remain with Fluidigm Singapore and no such rights are conveyed to EDB under the agreement.

On February 12, 2007, Fluidigm Singapore entered into a second letter agreement with EDB which provided for up to an additional SG$3.7 million (approximately US$2.8 million using a September 30, 2010 exchange rate) in incentive grant payments. The terms and conditions of this letter agreement are substantially the same as the October 2005 letter agreement, with the exception of the size of the potential grant, the term of the agreement and the specific levels of research, development and manufacturing activity required to maintain eligibility for such grants. This letter agreement requires that we employ at least 10 new research scientists and engineers in Singapore by May 31, 2009, that we employ at least 12 new research scientists and engineers in Singapore by May 31, 2011 and that we maintain at least 12 research scientists and engineers in total until May 31, 2013 to remain eligible for incentive grant payments. The requirements of the February 2007 agreement may only be satisfied by personnel employed in the research and development of our microfluidic instrumentation. The primary focus of this grant agreement was the ongoing development and manufacture in Singapore of instrumentation to be used with our microfluidic systems. This letter agreement applies to research, development and manufacturing activity by Fluidigm Singapore in Singapore from June 1, 2006 through May 31, 2011.

On March 27, 2008, Fluidigm Singapore entered into amended and restated versions of our October 2005 and February 2007 letter agreements with EDB. The purpose of these amendments was to consolidate and streamline the original agreements to eliminate sub-categories of eligible expenditures and rely on more general descriptions of the eligible expenditures that the parties had been applying in practice, to consolidate certain administrative terms and conditions of the incentive grant payments, and to remove various forms attached to the original letter agreements that had changed over time or were not part of the ongoing agreement between the parties. The January 2006 supplement to the October 2005 letter agreement remains in effect.

Our first letter agreement with EDB was completed in July 2010. The maximum amount of grant revenue available to us under our second letter agreement with EDB from September 30, 2010 through May 31, 2011 is SG$1.1 million (approximately US$0.8 million using a September 30, 2010 exchange rate) although we expect actual grant revenue to be significantly lower.

Loan to Gajus Worthington

On January 20, 2004, we entered into an Employee Loan Agreement, Secured Promissory Note and Stock Pledge Agreement with Mr. Worthington pursuant to which we loaned Mr. Worthington $250,000 at an interest rate of 3.52% per annum and the principal and interest were not due and payable until 7 years after the date of the loan or upon the earlier occurrence of certain events. The loan was secured by the pledge of 238,095 shares of our common stock held by Mr. Worthington and was otherwise non-recourse. The loan was extended to Mr. Worthington to assist him in purchasing a home for his personal residence in Northern California. On April 10, 2008, Mr. Worthington repaid the loan in full in accordance with Section 2.2(d) of the note by selling shares of our common stock held by Mr. Worthington to us at the fair value of such stock on the date of such sale, which was determined by the board of directors to be $11.16 per share. The note and Mr. Worthington's loan were repaid in full and cancelled in exchange for 25,975 shares of our common stock which Mr. Worthington transferred to us pursuant to the terms of a repurchase agreement dated April 10, 2008. This loan repayment and share cancellation transaction was approved by the board based on its determination that we received full and fair consideration for the cancellation of the loan and that the cancellation of the loan was in the best interests of our company and its stockholders.

Engagement of Townsend and Townsend and Crew LLP

Since before 2007, the law firm of Townsend and Townsend and Crew LLP, or Townsend, has served as our primary outside patent counsel. William Smith, our Vice President, Legal Affairs, General Counsel and Secretary as well a director from May 2000 until April 7, 2008, was a partner at Townsend from 1985 to April 1, 2008. Amounts paid to Townsend for services and direct patent fees were $576,000 and $312,000 for 2007 and the six months ended June 28, 2008. The accrued amount payable to Townsend as of June 28, 2008, was $411,000.

Registration Rights Agreement

Holders of our preferred stock and our co-founders are entitled to certain registration rights with respect to the common stock issued or issuable upon conversion of the preferred stock. See "Registration Rights" under "Description of Capital Stock" below for additional information.

Stock Option Grants

Certain stock option grants to our directors and executive officers and related option grant policies are described above in this prospectus under the caption "Management."

2009 Stock Option Repricing

In November 2009, we offered eligible holders of our stock options the opportunity to exchange certain options for new options with an exercise price per share equal to the fair value of our common stock on December 23, 2009. The participation of our executive officers and directors in this repricing is described in this prospectus under the caption "Management."

Employment Arrangements and Indemnification Agreements

We have entered into employment arrangements with certain of our executive officers. See "Management—Employment Agreements and Offer Letters" above.

We have also entered into indemnification agreements with each of our directors and executive officers. The indemnification agreements and our certificate of incorporation and bylaws require us to indemnify our directors and executive officers to the fullest extent permitted by Delaware law. See "Management—Limitations on Liability and Indemnification Matters" above.

Related Party Transaction Policy

We have adopted a formal policy that our executive officers, directors, holders of more than 5% of any class of our voting securities, and any member of the immediate family of and any entity affiliated with any of the foregoing persons, are not permitted to enter into a related party transaction with us without the prior consent of our audit committee, or other independent members of our board in the case it is inappropriate for our audit committee to review such transaction due to a conflict of interest. Any request for us to enter into a transaction with an executive officer, director, principal stockholder, or any of their immediate family members or affiliates, in which the amount involved exceeds $120,000 must first be presented to our audit committee for review, consideration and approval. In approving or rejecting any such proposal, our audit committee is to consider the relevant facts and circumstances available and deemed relevant to the audit committee, including, but not limited to, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related party's interest in the transaction. All of the transactions described above were entered into prior to the adoption of this current policy.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information with respect to the beneficial ownership of our common stock at September 30, 2010, as adjusted to reflect the sale of common stock offered by us in this offering, for:

- each person who we know beneficially owns more than five percent of our common stock;
- each of our directors;
- each of our named executive officers; and
- all of our directors and executive officers as a group.

We have determined beneficial ownership in accordance with SEC rules. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock that they beneficially own, subject to applicable community property laws.

Applicable percentage ownership is based on 21,158,887 shares of common stock outstanding at September 30, 2010. For purposes of the table below, we have assumed that shares of common stock will be outstanding upon completion of this offering, based upon an assumed initial public offering price of $ per share. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed to be outstanding all shares of common stock subject to options, warrants or other convertible securities held by that person or entity that are currently exercisable or exercisable within 60 days of September 30, 2010. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person. Beneficial ownership representing less than one percent is denoted with an "*."

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Fluidigm Corporation, 7000 Shoreline Court, Suite 100, South San Francisco, California 94080.

	Beneficial Ownership Prior to the Offering		Beneficial Ownership After the Offering	
Name of Beneficial Owner	Shares	Percentage	Shares	Percentage
5% Stockholders:				
Entities affiliated with Alloy Funds(1)	1,168,615	5.52%		%
Entities affiliated with EuclidSR Funds(2)(16)	1,509,606	7.12%		%
Entities affiliated with the Singapore government(3)	2,753,095	12.98%		%
Entities affiliated with Fidelity Funds(4)	1,932,590	9.13%		%
Entities affiliated with InterWest Funds(5)	1,178,662	5.57%		%
Entities affiliated with Lehman Funds(6)	1,128,834	5.33%		%
SMALLCAP World Fund, Inc.(7)	1,113,612	5.26%		%
Entities affiliated with Versant Funds(8)(10)	1,809,386	8.53%		%
Bruce Burrows	1,113,612	5.26%		%
Directors and Named Executive Officers:				
Gajus V. Worthington(9)	810,463	3.80%		%
Samuel D. Collela(10)(8)	1,809,386	8.53%		%
Vikram Jog(11)	189,614	*		*
Robert C. Jones(12)	207,326	*		*
Kenneth Nussbacher(13)	68,451	*		*
William M. Smith(14)	336,325	1.57%		%
Fredric Walder(15)	—	*		%
Raymond J. Whitaker(2)(16)	1,509,606	7.12%		%

Name of Beneficial Owner	Beneficial Ownership Prior to the Offering		Beneficial Ownership After the Offering	
	Shares	Percentage	Shares	Percentage
Mai Chan (Grace) Yow(17)	160,722	*		*
John Young(18)	15,000	*		*
Jeremy Loh(3)	2,753,095	12.98%		%
All directors and executive officers as a group (11 persons)	7,859,998	35.34%		%

(*) Less than one percent.

(1) Consists of 584,309 shares held of record by Alloy Ventures 2005, L.P., 568,948 shares held of record by Alloy Ventures 2002, L.P., and 15,358 shares held of record by Alloy Partners 2002, L.P. Alloy Ventures 2002, LLC is the General Partner of Alloy Ventures 2002, L.P. and Alloy Partners 2002, L.P. The Managing Members of Alloy Ventures 2002, LLC are Michael Hunkapiller , Craig C. Taylor, John F. Shoch, Douglas E. Kelly, Daniel I. Rubin and Tony Di Bona. Each of the Managing Members of Alloy Ventures 2002, LLC is also a Managing Member of Alloy Ventures 2005, LLC. The individuals listed herein may be deemed to have shared voting and dispositive power over the shares which are or may be deemed to be beneficially owned by Alloy Ventures 2005, L.P., Alloy Ventures 2002, L.P. and Alloy Partners 2002, L.P. Each Managing Member disclaims beneficial ownership of the shares except to extent of their pecuniary interest therein. The address of the entities affiliated with Alloy Ventures is 400 Hamilton Avenue, Fourth Floor, Palo Alto, CA 94301.

(2) Consists of 732,684 shares held of record by EuclidSR Partners, L.P. and 732,684 shares held of record by EuclidSR Biotechnology Partners, L.P. Raymond J. Whitaker, a member of our Board of Directors shares voting and investment power with Graham D.S. Anderson, Milton J. Pappas and Stephen K. Reidy, each of whom are General Partners of EuclidSR Associates, L.P., the General Partner of EuclidSR Partners and EuclidSR Biotechnology Associates, L.P., the General Partner of EuclidSR Biotechnology Partners. Each General Partner of EuclidSR Associates, L.P. and EuclidSR Biotechnology Associates, L.P. disclaims beneficial ownership of the shares except to the extent of their pecuniary interest therein. The address of the entities affiliated with EuclidSR Associates, L.P. and EuclidSR Biotechnology Associates, L.P. is 45 Rockefeller Plaza, Suite 1410, New York, NY 10111.

(3) Consists of 2,473,247 shares and a warrant to purchase 58,364 shares held of record by Biomedical Sciences Investment Fund Pte Ltd and 221,484 shares held of record by Singapore Bio-Innovations Pte Ltd, EDB Investments Pte Ltd, or EDB Investments, is the parent entity of Biomedical Sciences Investment Fund Pte Ltd and Singapore Bio-Innovations Pte Ltd. The Economic Development Board of Singapore, or EDB, is the parent entity of EDB Investments. EDB is a Singapore government entity. Jeremy Loh is a member of our Board of Directors and a Vice President (Investments), San Francisco Center for EDB Investments Pte Ltd, Singapore. Dr. Loh disclaims beneficial ownership of these shares, except to the extent of his pecuniary interest in such shares. EDB Investments, EDB and the Singapore government may be deemed to have shared voting and dispositive power over the shares owned beneficially and of record by Biomedical Sciences Investment Fund Pte Ltd and Singapore Bio-Innovations Pte Ltd. The address associated with entities affiliated with EDB is 250, North Bridge Road, #20-02, Raffles City Tower, Singapore 179101.

(4) Consists of 150,159 shares held of record by Fidelity Contrafund: Fidelity Advisor New Insights Fund, 1,369,960 shares held of record by Fidelity Contrafund: Fidelity Contrafund and 412,471 shares held of record by Variable Insurance Products Fund II: Contrafund Portfolio. Each of these entities is a registered investment fund (each, a “Fund”) advised by Fidelity Management & Research Company (“FMR Co.”), a registered investment adviser under the Investment Advisers Act of 1940, as amended. The address of FMR Co., a wholly-owned subsidiary of FMR Corp. and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940 is 82 Devonshire Street, Boston Massachusetts 02109. Edward C. Johnson 3d, FMR Corp., through its control of FMR Co., and each Fund has power to dispose of the securities owned by such Fund. Neither FMR Corp. nor Edward C. Johnson 3d, Chairman of FMR Corp., has sole power to vote or direct the voting of the shares owned directly by each Fund, which power resides with each Fund’s Board of Trustees. Each Fund is an affiliate of a broker-dealer. Each Fund purchased the securities in the ordinary course of business and, at the time of the purchase of the securities, no Fund had any agreements or understandings, directly or indirectly, with any person to distribute the securities. No Fund intends to sell, transfer, assign, pledge or hypothecate or otherwise enter into any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities through an affiliated broker-dealer.

(5) Consists of 53,862 shares held of record by InterWest Investors VII, L.P. and 1,124,800 shares held of record by InterWest Partners VII, L.P. InterWest Management Partners VII, L.L.C. has sole voting and investment control over the shares owned by InterWest Partners VII, L.P. and InterWest Investors VII, L.P. Harvey B. Cash, Philip T. Gianos, W. Scott Hedrick, W. Stephen Holmes, Gilbert H. Kliman, Thomas L. Rosch and Arnold L. Oronsky, each Managing Directors of InterWest Management Partners VII, LLC, have shared voting and investment control over the shares owned by InterWest Partners VII, L.P. and InterWest Investors VII, L.P. Stephen C. Bowsher, Alan W. Crites, Rodney A. Ferguson and Karen A. Wilson are Members of InterWest Management Partners VII, L.L.C. All Managing Directors and Members disclaim beneficial ownership of the shares owned by InterWest Partners VII, LP and InterWest Investor VII, LP except to the extent of their pro rata partnership interests in such shares. The address of the entities affiliated with InterWest is 2710 Sand Hill Road, Second Floor, Menlo Park, CA 94025.

(6) Consists of 276,225 shares and a warrant to purchase 5,982 shares held of record by Lehman Brothers Healthcare Venture Capital, L.P., 61,777 shares and a warrant to purchase 1,338 shares held of record by Lehman Brothers Offshore Partnership Account 2000/2001, L.P., 528,699 shares and a warrant to purchase 11,451 shares held of record by Lehman Brothers P.A., LLC, and 238,203 shares and a warrant to purchase 5,159 shares held of record by Lehman Brothers Partnership Account 2000/2001, L.P. Hingge Hsu, a former member of our Board of Directors, was formerly employed by Lehman Brothers Inc., and now serves as a consultant of Lehman

Brothers Inc. In each of the limited partnerships referenced above, Lehman Brothers Inc. controls the general partner of the limited partnership. In the limited liability company, Lehman Brothers Inc. controls the manager of the limited liability company. In all four entities listed above, Lehman Brothers Holdings Inc., a public reporting company under the Securities Exchange Act of 1934, as amended, ultimately controls the manager and the general partners of the entities and ultimately has voting and investment control over the shares held by such entities. The address of the entities affiliated with Lehman Brothers Inc. is 1271 Sixth Avenue, 45th Floor, New York, NY 10020.

(7) Consists of 1,309,740 shares and a warrant to purchase 28,367 shares held of record by SMALLCAP World Fund, Inc., or SMALLCAP. SMALLCAP is an investment company registered under the Investment Company Act of 1940. Capital Research and Management Company, or CRMC, an investment adviser registered under the Investment Advisers Act of 1940, is the investment adviser to SMALLCAP and has sole dispositive power over these shares. Gordon Crawford, J. Blair Frank, Jonathan Knowles, Brady L. Enright, Mark E. Denning and Claudia P. Huntington are the primary portfolio counselors of CRMC. In such capacity, CRMC Messrs. Crawford, Frank, Knowles, Enright, Denning and Ms. Huntington may be deemed to beneficially own the shares held by SMALLCAP. CRMC, however, each disclaims such beneficial ownership. The address of the SMALLCAP is The Capital Group Companies, 333, South Hope Street, Los Angeles, California 90071.

(8) Consists of 1,608,654 shares held of record by Versant Venture Capital I, L.P., 29,510 shares held of record by Versant Affiliates Fund I-A, L.P., 87,085 shares held of record by Versant Affiliates Fund I-B, L.P. and 33,545 shares held of record by Versant Side Fund I, L.P. Voting and investment power over the shares directly held by Versant Venture Capital I, L.P., Versant Affiliates Fund I-A, L.P., Versant Affiliates Fund I-B, L.P., and Versant Side Fund I, L.P. is held by Versant Ventures I, LLC, their sole General Partner. Samuel D. Colella, a member of our Board of Directors is a Managing Member of Versant Ventures I, LLC but he disclaims beneficial ownership of these shares, except to the extent of his pecuniary interest in such shares. The individual Managing Members of Versant Ventures I, LLC are Brian G. Atwood, Samuel D. Colella, Ross A. Jaffe, William J. Link, Barbara N. Lubash, Donald B. Milder, and Rebecca B. Robertson, all of whom share voting and dispositive control. Each respective individual General Partner disclaims beneficial ownership of these shares, except to the extent of their pecuniary interest in such shares. The address of the entities affiliated with Versant Ventures is 3000 Sand Hill Road, Building Four, Suite 210, Menlo Park, CA 94025.

(9) Consists of 648,138 shares held of record by Gajus Worthington and Jami A. Worthington as TTEES of the Worthington Family Trust dtd 3-6-07 and options to purchase 162,325 shares of common stock that are exercisable within 60 days of September 30, 2010, of which 142,325 shares are vested as of November 29, 2010.

(10) Consists of 1,608,654 shares held of record by Versant Venture Capital I, L.P., 29,510 shares held of record by Versant Affiliates Fund I-A, L.P., 87,085 shares held of record by Versant Affiliates Fund I-B, L.P. and 33,545 shares held of record by Versant Side Fund I, L.P. and warrants to purchase 38,092 shares held by these funds. Voting and investment power over the shares directly held by Versant Venture Capital I, L.P., Versant Affiliates Fund I-A, L.P., Versant Affiliates Fund I-B, L.P., and Versant Side Fund I, L.P. is held by Versant Ventures I, LLC, their sole General Partner. Samuel D. Colella, a member of our Board of Directors is a Managing Member of Versant Ventures I, LLC but he disclaims beneficial ownership of these shares, except to the extent of his pecuniary interest in such shares, and outstanding options to purchase 15,000 shares of common stock that are exercisable within 60 days of September 30, 2010, of which 12,500 shares are vested as of November 29, 2010.

(11) Consists of options to purchase 189,614 shares of common stock that are exercisable within 60 days of September 30, 2010, of which 127,449 shares are vested as of November 29, 2010.

(12) Consists of options to purchase 207,326 shares of common stock that are exercisable within 60 days of September 30, 2010, of which 180,162 shares are vested as of November 29, 2010.

(13) Consists of options to purchase 68,451 shares of common stock that are exercisable within 60 days of September 30, 2010, of which 68,451 shares are vested as of November 29, 2010.

(14) Consists of 85,714 shares held of record by William M. Smith and options to purchase 250,611 shares of common stock, that are exercisable within 60 days of September 30, 2010, of which 220,821 are vested as of November 29, 2010.

(15) Consists of options to purchase 200,000 shares of common stock that are exercisable within 60 days of September 30, 2010, none of which are vested as of November 29, 2010.

(16) Consists of 732,684 shares and a warrant to purchase 15,869 shares held of record by EuclidSR Partners, L.P. and 732,684 shares and a warrant to purchase 15,869 shares held of record by EuclidSR Biotechnology Partners, L.P. Raymond J. Whitaker, a member of our Board of Directors shares voting and investment power with Graham D.S. Anderson, Elaine V. Jones, Milton J. Pappas and Stephen K. Reidy, each of whom are General Partners of EuclidSR Associates, L.P., the General Partner of EuclidSR Partners and EuclidSR Biotechnology Associates, L.P., the General Partner of EuclidSR Biotechnology Partners. Mr. Whitaker disclaims beneficial ownership of the shares except to the extent of hi pecuniary interest therein, and options to purchase 15,000 shares of common stock that are exercisable within 60 days of September 30, 2010, of which 12,500 shares are vested as of November 29, 2010.

(17) Consists of options to purchase 193,997 shares of common stock that are exercisable within 60 days of September 30, 2010, of which 160,722 are vested as of November 29, 2010.

(18) Consists of options to purchase 15,000 shares of common stock that are exercisable within 60 days of September 30, 2010, all of which are vested as of November 29, 2010.

DESCRIPTION OF CAPITAL STOCK

General

The following is a summary of the rights of our common stock and preferred stock and of certain provisions of our restated certificate of incorporation and bylaws, as they will be in effect upon the completion of this offering. For more detailed information, please see our restated certificate of incorporation and bylaws, which are filed as exhibits to the registration statement of which this prospectus is part.

Immediately following the completion of this offering, our authorized capital stock will consist of 320,000,000 shares, all with a par value of $0.0035 per share, of which:

- 300,000,000 shares are designated as common stock; and
- 20,000,000 shares are designated as preferred stock.

As of September 30, 2010, we had outstanding 21,158,887 shares of common stock held of record by 267 stockholders, assuming the automatic conversion of all outstanding shares of our preferred stock on a one-for-one basis into 17,812,469 shares of common stock. In addition, as of September 30, 2010, 3,195,172 shares of our common stock were subject to outstanding options and 668,845 shares of our capital stock were subject to outstanding warrants. No options will expire prior to the completion of this offering. For more information on our capitalization, see “Capitalization” above.

Common Stock

The holders of our common stock are entitled to one vote per share on all matters to be voted on by our stockholders. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by our Board of Directors out of funds legally available for that purpose. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share ratably in all assets remaining after the payment of liabilities, subject to the prior distribution rights of preferred stock then outstanding. Holders of common stock have no preemptive, conversion or subscription rights. There are no redemption or sinking fund provisions applicable to the common stock.

Preferred Stock

Immediately after the completion of this offering, no shares of preferred stock will be outstanding (assuming the automatic conversion of all outstanding shares of our preferred stock on a one-for-one basis into 17,812,469 shares of common stock immediately prior to the completion of this offering). Though we currently have no plans to issue any shares of preferred stock, upon the closing of this offering and the filing of our restated certificate of incorporation, our Board of Directors will have the authority, without further action by our stockholders, to designate and issue up to 20,000,000 shares of preferred stock in one or more series. Our Board of Directors may also designate the rights, preferences and privileges each such series of preferred stock, any or all of which may be greater than or senior to those of the common stock. Though the actual effect of any such issuance on the rights of the holders of common stock will not be known until our Board of Directors determines the specific rights of the holders of preferred stock, the potential effects of such an issuance include:

- diluting the voting power of the holders of common stock;
- reducing the likelihood that holders of common stock will receive dividend payments;
- reducing the likelihood that holders of common stock will receive payments in the event of our liquidation, dissolution, or winding up; and
- delaying, deterring or preventing a change-in-control or other corporate takeover.

Warrants

As of September 30, 2010, we had outstanding warrants to purchase an aggregate of 668,845 shares of our preferred stock, all of which will be converted into warrants to purchase an equal number of shares of our common stock at exercise prices ranging from $7.00 per share to $14.00 per share. These warrants will expire at various times between March 18, 2012 and June 14, 2017. In the event of a distribution of dividends, a stock split, a reorganization, a reclassification, a consolidation, or a similar event, each warrant provides for adjustment of the exercise price and the number of shares issuable upon exercise.

Potential Issuance of Common Stock

On March 7, 2003, we entered into a Master Closing Agreement with Oculus Pharmaceuticals, Inc. and The UAB Research Foundation, or UAB, related to certain intellectual property and technology rights licensed by us from UAB. Pursuant to the agreement, we are obligated to issue UAB shares of our common stock with a value equal to approximately $1,500,000 upon the achievement of a certain milestone and based upon the fair market value of our common stock at the time the milestone is achieved. We currently do not anticipate achieving this milestone in the foreseeable future and do not anticipate issuing these shares. The potential issuance discussed above is not reflected in the number of shares of common stock outstanding in this prospectus.

Registration Rights

As of September 30, 2010, the holders of an aggregate of 19,559,804 shares of our common stock, which includes 17,542,041 shares of common stock issued on conversion of outstanding preferred stock and 668,845 shares of common stock issuable upon the exercise of warrants and conversion of preferred stock underlying such warrants, are entitled to the following rights with respect to the registration of such shares for public resale under the Securities Act, pursuant to an investor rights agreement by and among us and certain of our stockholders. In addition, the aggregate number above includes an additional 1,348,918 shares of common stock entitled to the rights described below, in the section titled “Piggyback Registration Rights.” We refer to these shares collectively as “registrable securities.”

The registration of shares of common stock as a result of the following rights being exercised would enable the holders to trade these shares without restriction under the Securities Act when the applicable registration statement is declared effective. Ordinarily, we will be required to pay all expenses, other than underwriting discounts and commissions, related to any registration effected pursuant to the exercise of these registration rights.

The registration rights terminate upon the earlier of five years after completion of this offering, or, with respect to the registration rights of an individual holder, when the holder of one percent or less of our outstanding common stock can sell all of such holder’s registrable securities in any three-month period without registration, in compliance with Rule 144 of the Securities Act or another similar exemption.

Demand Registration Rights

If at any time after this offering the holders of at least a majority of the registrable securities request in writing that we effect a registration with respect to at least 50% of their shares that has a reasonably anticipated aggregate price to the public, net of underwriting discounts and commissions in excess of $20,000,000, we may be required to register their shares. At most, we are obligated to effect two registrations for the holders of registrable securities in response to these demand registration rights. Depending on certain conditions, however, we may defer such registration for up to 90 days. If the holders requesting registration intend to distribute their shares by means of an underwriting, the managing underwriter of such offering will have the right to limit the number of shares to be underwritten for reasons related to the marketing of the shares.

Piggyback Registration Rights

If at any time after this offering we propose to register any shares of our common stock under the Securities Act, subject to certain exceptions, the holders of registrable securities will be entitled to notice of the registration and to include their shares of registrable securities in the registration. If our proposed registration involves an underwriting, the managing underwriter of such offering will have the right to limit the number of shares to be underwritten for reasons related to the marketing of the shares.

Form S-3 Registration Rights

If at any time after we become entitled under the Securities Act to register our shares on Form S-3 a holder of registrable securities requests in writing that we register their shares for public resale on Form S-3 and the reasonably anticipated price to the public of the offering exceeds $2,000,000, we will be required to use our best efforts to effect such registration; provided, however, that if such registration would be seriously detrimental to us or our stockholders, we may defer the registration for up to 90 days.

Voting Rights

Under the provisions of our amended and restated certificate of incorporation to become effective upon completion of this offering, holders of our common stock are entitled to one vote for each share of common stock held by such holder on any matter submitted to a vote at a meeting of stockholders. In addition, our amended and restated certificate of incorporation provides that certain corporate actions require the approval of our stockholders. These actions, and the vote required, are as follows:

- the removal of a director requires the vote of a majority of the voting power of our issued and outstanding capital stock entitled to vote in the election of directors; and
- the amendment of provisions of our amended and restated certificate of incorporation relating to blank check preferred stock, the classification of our directors, the removal of directors, the filling of vacancies on our Board of Directors, cumulative voting, annual and special meetings of our stockholders and require the vote of 66 2/3% of our then outstanding voting securities.

Anti Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Certain provisions of Delaware law and our restated certificate of incorporation and bylaws that will become effective upon completion of this offering contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids. These provisions are also designed in part to encourage anyone seeking to acquire control of us to first negotiate with our Board of Directors. We believe that the advantages gained by protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of our common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Certificate of Incorporation and Bylaws

Our amended and restated certificate of incorporation and bylaws to become effective upon completion of this offering include provisions that:

- authorize our board of directors to issue, without further action by the stockholders, up to 20,000,000 shares of undesignated preferred stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;

- specify that special meetings of our stockholders can be called only by our Board of Directors, the Chairman of the Board, the Chief Executive Officer or the President;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our Board of Directors;
- provide that directors may be removed only for cause;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- establish that our board of directors is divided into three classes, Class I, Class II, and Class III, with each class serving staggered terms;
- specify that no stockholder is permitted to cumulate votes at any election of the Board of Directors; and
- require a super majority of votes to amend certain of the above-mentioned provisions.

Delaware Anti-Takeover Statute

We are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- prior to the date of the transaction, the Board of Directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not for determining the outstanding voting stock owned by the interested stockholder, (1) shares owned by persons who are directors and also officers, and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to the date of the transaction, the business combination is approved by the Board of Directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may discourage business combinations or other attempts that might result in a premium over the market price for the shares of common stock held by our stockholders.

The provisions of Delaware law and our restated certificate of incorporation and bylaws to become effective upon completion of this offering could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. The transfer agent's address is 250 Royall Street, Canton, MA 02021, and its telephone number is (781) 575-2900.

NASDAQ Global Market Listing

We intend to list our common stock on The NASDAQ Global Market under the symbol "FLDM."

SHARES ELIGIBLE FOR FUTURE SALE

Before this offering, there has not been a public market for shares of our common stock. Future sales of substantial amounts of shares of our common stock, including shares issued upon the exercise of outstanding options, in the public market after this offering, or the possibility of these sales occurring, could cause the prevailing market price for our common stock to fall or impair our ability to raise equity capital in the future.

Upon the completion of this offering, a total of shares of common stock will be outstanding, assuming that there are no exercises of options or warrants after September 30, 2010. Of these shares, all shares of common stock sold in this offering by us, plus any shares sold upon exercise of the underwriters' over-allotment option, will be freely tradable in the public market without restriction or further registration under the Securities Act, unless these shares are held by "affiliates," as that term is defined in Rule 144 under the Securities Act.

The remaining 21,158,887 shares of common stock will be "restricted securities," as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rules 144 or 701 under the Securities Act, which are summarized below.

Subject to the lock up agreements described below and the provisions of Rules 144 and 701 under the Securities Act, these restricted securities will be available for sale in the public market as follows:

Date	Number of Shares
On the date of this prospectus	
Between 90 and 180 days after the date of this prospectus	
At various times beginning more than 180 days after the date of this prospectus	

In addition, of the 3,195,172 shares of our common stock that were subject to stock options outstanding as of September 30, 2010, options to purchase 1,979,840 shares of common stock were vested as of September 30, 2010 and will be eligible for sale 180 days following the effective date of this offering.

Rule 144

In general, under Rule 144 as currently in effect, once we have been subject to public company reporting requirements for at least 90 days, a person who is not deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and who has beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than our affiliates, is entitled to sell those shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then that person is entitled to sell those shares without complying with any of the restrictions of Rule 144 regardless of how long we have been subject to public company reporting requirements.

In general, under Rule 144, as currently in effect, our affiliates or persons selling shares on behalf of our affiliates are entitled to sell upon expiration of the lock-up agreements described above, within any three-month period beginning 90 days after the date of this prospectus, a number of shares that does not exceed the greater of:

- 1% of the number of shares of common stock then outstanding, which will equal approximately shares immediately after this offering; or
- the average weekly trading volume of the common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to that sale.

Sales under Rule 144 by our affiliates or persons selling shares on behalf of our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

Rule 701

In general, under Rule 701 as currently in effect, any of our employees, consultants or advisors who purchase shares from us in connection with a compensatory stock or option plan or other written agreement in a transaction before the effective date of this offering that was completed in reliance on Rule 701 and complied with the requirements of Rule 701 will, subject to the lock up restrictions described below, be eligible to resell such shares 90 days after the effective date of this offering in reliance on Rule 144, but without compliance with certain restrictions, including the holding period, contained in Rule 144.

Lock Up Agreements

We and all of our directors and officers, as well as the other holders of substantially all shares of common stock outstanding immediately prior to this offering, have agreed that, without the prior written consent of the representatives on behalf of the underwriters, we and they will not, during the period ending 180 days after the date of this prospectus:

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock;
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock,

whether any transaction described above is to be settled by delivery of shares of our common stock or such other securities, in cash or otherwise. This agreement is subject to certain exceptions, and is also subject to extension for up to an additional days, as set forth in “Underwriters.”

Registration Rights

Upon completion of this offering, the holders of 19,559,804 shares of common stock or common stock issuable upon exercise of warrants or their transferees will be entitled to various rights with respect to the registration of these shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration, except for shares purchased by affiliates. See “Description of Capital Stock—Registration Rights” for additional information.

Registration Statements

We intend to file a registration statement on Form S-8 under the Securities Act covering all of the shares of common stock subject to options outstanding or reserved for issuance under our stock plans. We expect to file this registration statement as soon as practicable after this offering. In addition, we intend to file a registration statement on Form S-8 under the Securities Act for the resale of shares of common stock issued upon the exercise of options that were not granted under Rule 701. We expect to file this registration statement as soon as practicable after this offering. However, none of the shares registered on Form S-8 will be eligible for resale until the expiration of the lock up agreements to which they are subject.

MATERIAL UNITED STATES FEDERAL INCOME AND ESTATE TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following is a general discussion of certain material United States federal income and estate tax considerations with respect to the ownership and disposition of shares of our common stock applicable to non-U.S. holders. In general, a "non-U.S. holder" is any holder other than:

- an individual who is a citizen or resident of the United States for United States federal income tax purposes;
- a corporation (or other entity treated as a corporation for United States federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is includible in gross income for United States federal income tax purposes regardless of its source; or
- a trust if (a) a court within the United States is able to exercise primary supervision over the administration of the trust and one or more United States persons have the authority to control all substantial decisions of the trust or (b) it has a valid election in effect under applicable Treasury regulations to be treated as a United States person.

This discussion is based on current provisions of the Internal Revenue Code of 1986, as amended, or the Code, Treasury regulations promulgated thereunder, judicial opinions, published positions of the Internal Revenue Service and all other applicable authorities, all of which are subject to change (possibly with retroactive effect). We assume in this discussion that a non-U.S. holder holds shares of our common stock as a capital asset (generally property held for investment).

This discussion does not address all aspects of United States federal income and estate taxation that may be important to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances, nor does it address any aspects of United States state or local taxes or non-U.S. taxes. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder subject to special treatment under the United States federal income tax laws, including, without limitation:

- banks, thrifts, insurance companies or other financial institutions;
- partnerships or other pass-through entities (or entities treated as such for United States federal income tax purposes) or persons that hold shares of our common stock through such entities;
- controlled foreign corporations, passive foreign investment companies, and corporations that accumulate earnings to avoid United States federal income tax;
- tax-exempt organizations;
- tax-qualified retirement plans;
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- persons that own, or are deemed to own, more than five percent of our capital stock (except to the extent specifically set forth below);
- dealers in securities or currencies;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;
- persons subject to the alternative minimum tax;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- certain form citizens or long-term residents of the United States; and

- persons that will hold common stock as a position in a hedging transaction, “straddle” or “conversion transaction” for tax purposes.

If a partnership or other pass-through entity (or entity treated as such for United States federal income tax purposes) holds shares of our common stock, the tax treatment of a partner in such partnership or an owner of such other pass-through entity will generally depend upon the status of such partner or other owner and the activities of such partnership or other entity. Any partnership or other pass-through entity that holds shares of our common stock or any partner in such partnership or owner of such other entity should consult its own tax advisors.

THIS DISCUSSION IS FOR GENERAL INFORMATION PURPOSES ONLY AND IS NOT TAX ADVICE. EACH PROSPECTIVE HOLDER OF SHARES OF OUR COMMON STOCK SHOULD CONSULT HIS, HER OR ITS OWN TAX ADVISOR WITH RESPECT TO THE UNITED STATES FEDERAL, STATE AND LOCAL TAX CONSEQUENCES AND NON-U.S. TAX CONSEQUENCES OF THE ACQUISITION, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK.

Dividends

If we make cash or other property distributions on our common stock, such distributions will constitute dividends for United States federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under United States federal income tax principles. To the extent those distributions exceed both our current and our accumulated earnings and profits, such excess will constitute a return of capital and will first reduce the non-U.S. holder’s adjusted tax basis in our common stock, but not below zero. Any remaining excess will be treated as gain from the sale or other disposition of shares of our common stock (as described under “—Gain on Sale or Other Disposition of Common Stock” below).

In general, dividends we pay, if any, to a non-U.S. holder will be subject to United States withholding tax at a rate of 30% of the gross amount. The withholding tax might not apply or might apply at a reduced rate under the terms of an applicable income tax treaty between the United States and the non-U.S. holder’s country of residence. A non-U.S. holder must demonstrate its entitlement to treaty benefits by certifying, among other things, its nonresident status. A non-U.S. holder generally can meet this certification requirement by providing an Internal Revenue Service Form W-8BEN or appropriate substitute form to us or our paying agent. Also, special rules apply if the dividends are effectively connected with a trade or business carried on by the non-U.S. holder within the United States and, if a treaty applies, are attributable to a permanent establishment of the non-U.S. holder within the United States. Dividends effectively connected with this United States trade or business, and, if a treaty applies, attributable to such a permanent establishment of a non-U.S. holder, generally will not be subject to United States withholding tax if the non-U.S. holder files certain forms, including Internal Revenue Service Form W-8ECI (or any successor form), with us or our paying agent, and generally will be subject to United States federal income tax on a net income basis, in the same manner as if the non-U.S. holder were a resident of the United States. A non-U.S. holder that is a corporation may be subject to an additional “branch profits tax” at a rate of 30% (or a reduced rate as may be specified by an applicable income tax treaty) on the repatriation from the United States of its “effectively connected earnings and profits,” subject to certain adjustments.

A non-U.S. holder of shares of our common stock eligible for a reduced rate of United States withholding tax pursuant to an income tax treaty must provide certification to us or our paying agent prior to the payment of dividends and such certifications must be updated periodically. Non-U.S. holders that do not timely provide us or our paying agent with the required certification, but that qualify for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the Internal Revenue Service. Non-U.S. holders should consult their tax advisors regarding their entitlement to benefits under an applicable income tax treaty.

Gain on Sale or Other Disposition of Common Stock

Subject to the discussion below regarding back up withholding, a non-U.S. holder generally will not be subject to United States federal income tax on any gain realized upon the sale or other disposition of the holder's shares of our common stock unless:

- the gain is effectively connected with a trade or business carried on by the non-U.S. holder within the United States and, if required by an applicable income tax treaty as a condition to subjecting a non-U.S. holder to United States income tax on a net basis, the gain is attributable to a permanent establishment of the non-U.S. holder maintained in the United States, in which case the non-U.S. holder will be subject to United States federal income tax on any gain realized upon the sale or other disposition on a net income basis, in the same manner as if the non-U.S. holder were a resident of the United States. Furthermore, the branch profits tax discussed above may also apply if the non-U.S. holder is a corporation;
- the non-U.S. holder is an individual and is present in the United States for 183 days or more in the taxable year of disposition and certain other tests are met, in which case the non-U.S. holder will be subject to a flat 30% tax (or such lower rate specified by an applicable income tax treaty) on any gain realized upon the sale or other disposition, which tax may be offset by United States source capital losses (even though the individual is not considered a resident of the United States), provided the non-U.S. holder has timely filed United States federal income tax returns with respect to such losses; or
- we are or have been a United States real property holding corporation, or a USRPHC, for United States federal income tax purposes at any time within the shorter of the five-year period preceding the disposition and the non-U.S. holder's holding period. We do not believe that we are or have been a USRPHC, and we do not anticipate becoming a USRPHC. If we have been in the past or were to become a USRPHC at any time during this period, generally gains realized upon a disposition of shares of our common stock by a non-U.S. holder that did not directly or indirectly own more than 5% of our common stock during this period would not be subject to United States federal income tax, provided that our common stock is "regularly traded on an established securities market" (within the meaning of Section 897(c)(3) of the Code). Our common stock will be treated as regularly traded on an established securities market during any period in which it is listed on a registered national securities exchange or any over-the-counter market. If gain on the sale or other taxable disposition of our stock were subject to taxation pursuant to this bullet point, the non-U.S. holder would be subject to regular United States federal income tax with respect to such gain in generally the same manner as a United States person.

United States Federal Estate Tax

Shares of our common stock that are owned or treated as owned by an individual who is not a citizen or resident (as defined for United States federal estate tax purposes) of the United States at the time of death will be includible in the individual's gross estate for United States federal estate tax purposes, unless an applicable estate tax treaty provides otherwise, and therefore may be subject to United States federal estate tax.

Backup Withholding, Information Reporting and Other Reporting Requirements

Generally, we must report annually to the Internal Revenue Service and to each non-U.S. holder the amount of dividends paid to, and the tax withheld with respect to, each non-U.S. holder. These reporting requirements apply regardless of whether withholding was reduced or eliminated by an applicable tax treaty. Copies of this information also may be made available under the provisions of a specific treaty or agreement with the tax authorities in the country in which the non-U.S. holder resides or is established.

United States backup withholding tax is imposed (at a current rate of 28%, which rate is scheduled to increase to 31% for payments made on or after January 1, 2011) on certain payments to persons that fail to furnish the information required under the United States information reporting requirements. A non-U.S. holder

of shares of our common stock will be subject to this backup withholding tax on dividends we pay unless the holder certifies, under penalties of perjury, among other things, its status as a non-U.S. holder (and we or our paying agent do not have actual knowledge or reason to know the holder is a United States person) or otherwise establishes an exemption.

Under the Treasury regulations, the payment of proceeds from the disposition of shares of our common stock by a non-U.S. holder made to or through a United States office of a broker generally will be subject to information reporting and backup withholding unless the beneficial owner certifies, under penalties of perjury, among other things, its status as a non-U.S. holder (and we or our paying agent do not have actual knowledge or reason to know the holder is a United States person) or otherwise establishes an exemption. The payment of proceeds from the disposition of shares of our common stock by a non-U.S. holder made to or through a non-U.S. office of a broker generally will not be subject to backup withholding and information reporting, except as noted below. In the case of proceeds from a disposition of shares of our common stock by a non-U.S. holder made to or through a non-U.S. office of a broker that is:

- a U.S. person;
- a "controlled foreign corporation" for United States federal income tax purposes;
- a non-U.S. person 50% or more of whose gross income from certain periods is effectively connected with a United States trade or business; or
- a non-U.S. partnership if at any time during its tax year (a) one or more of its partners are U.S. persons who, in the aggregate, hold more than 50% of the income or capital interests of the partnership or (b) the non-U.S. partnership is engaged in a U.S. trade or business;

information reporting (but not backup withholding) will apply unless the broker has documentary evidence in its files that the owner is a non-U.S. holder and certain other conditions are satisfied, or the beneficial owner otherwise establishes an exemption (and the broker has no actual knowledge or reason to know to the contrary).

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder may generally be refunded or credited against the non-U.S. holder's United States federal income tax liability, if any, provided that the required information is furnished to the Internal Revenue Service in a timely manner.

Recently Enacted Legislation Affecting Taxation of Our Common Stock Held by or Through Foreign Entities

Recently enacted legislation generally will impose a U.S. federal withholding tax of 30% on dividends and the gross proceeds of a disposition of our common stock paid after December 31, 2012 to a "foreign financial institution" (as specially defined under these rules) unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners). The legislation also will generally impose a U.S. federal withholding tax of 30% on dividends and the gross proceeds of a disposition of our common stock paid after December 31, 2012 to a non-financial foreign entity unless such entity provides the withholding agent with a certification identifying the direct and indirect U.S. owners of the entity. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. Prospective investors are encouraged to consult with their own tax advisors regarding the possible implications of this legislation on their investment in our common stock.

UNDERWRITING

Subject to the terms and conditions of the underwriting agreement, the underwriters named below, through their representatives Deutsche Bank Securities Inc. and Piper Jaffray & Co., have severally agreed to purchase from us the following respective numbers of shares of common stock at a public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus:

Underwriters	Number of Shares
Deutsche Bank Securities Inc.	
Piper Jaffray & Co.	
Total	

The underwriting agreement provides that the obligations of the several underwriters to purchase the shares of common stock offered hereby are subject to certain conditions precedent and that the underwriters will purchase all of the shares of common stock offered by this prospectus, other than those covered by the over-allotment option described below, if any of these shares are purchased.

We have been advised by the representatives of the underwriters that the underwriters propose to offer the shares of common stock to the public at the public offering price set forth on the cover of this prospectus and to dealers at a price that represents a concession not in excess of $ per share under the public offering price. The underwriters may allow, and these dealers may re-allow, a concession of not more than $ per share to other dealers. After the initial public offering, representatives of the underwriters, may change the offering price and other selling terms.

We have granted to the underwriters an option, exercisable not later than 30 days after the date of this prospectus, to purchase up to additional shares of common stock at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus. The underwriters may exercise this option only to cover over-allotments made in connection with the sale of the common stock offered by this prospectus. To the extent that the underwriters exercise this option, each of the underwriters will become obligated, subject to conditions, to purchase approximately the same percentage of these additional shares of common stock as the number of shares of common stock to be purchased by it in the above table bears to the total number of shares of common stock offered by this prospectus. We will be obligated, pursuant to the option, to sell these additional shares of common stock to the underwriters to the extent the option is exercised. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriting discounts and commissions per share are equal to the public offering price per share of common stock less the amount paid by the underwriters to us per share of common stock. The underwriting discounts and commissions are % of the initial public offering price. We have agreed to pay the underwriters the following discounts and commissions, assuming either no exercise or full exercise by the underwriters of the underwriters' over-allotment option:

		Total Fees	
	Fee per Share	Without Exercise of Over-Allotment Option	With Full Exercise of Over-Allotment Option
Discounts and commissions paid by us	$	$	$

In addition, we estimate that our share of the total expenses of this offering, excluding underwriting discounts and commissions, will be approximately $.

We have agreed to indemnify the underwriters against some specified types of liabilities, including liabilities under the Securities Act, and to contribute to payments the underwriters may be required to make in respect of any of these liabilities.

Each of our officers, directors, stockholders and holders of our options and warrants have agreed not to offer, sell, contract to sell, grant any option to purchase or otherwise dispose of, or enter into any transaction that is designed to, or could be expected to, result in the disposition of any shares of our common stock or other securities convertible into or exchangeable or exercisable for shares of our common stock or derivatives of our common stock owned by these persons prior to this offering or common stock issuable upon exercise of options or warrants held by these persons for a period of 180 days after the effective date of the registration statement of which this prospectus is a part without the prior written consent of the representatives of the underwriters. This consent may be given at any time without public notice. Transfers can be made during the lock-up period in the case of:

- transfers of shares of common stock acquired in this offering or in open market transactions after the completion of this offering, provided that no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made in connection with subsequent sales of common stock or other securities acquired in such open market transactions;
- transfers of shares of common stock or our other securities as a bona fide gift;
- transfers of shares of common stock or our other securities by will or intestacy to the transferor's immediate family or to a trust, the beneficiaries of which are the transferor and the transferor's immediate family;
- distributions of shares of common stock or our other securities to limited partners, members or shareholders of the transferor, or
- the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of common stock, provided that such plan does not provide for the transfer of common stock during the restricted period.

In addition, in the case of a transfer pursuant to the second, third and fourth bullets above, the transfer will not be permitted unless the transferee signs a lock-up agreement and no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made by the transferor in connection with such transfers. We have entered into a similar agreement with the representatives of the underwriters, except that without such consent, we may issue shares of common stock and grant options pursuant to our employee benefit plans, provided that each recipient of such shares or options signs a lock-up agreement, and file a registration statement on Form S-8 for the registration of shares issued pursuant to our employee benefit plans.

There are no agreements between the representatives and any of our stockholders or affiliates releasing them from these lock-up agreements prior to the expiration of the 180-day period.

The representatives of the underwriters have advised us that the underwriters do not intend to confirm sales to any account over which they exercise discretionary authority.

In connection with the offering, the underwriters may purchase and sell shares of our common stock in the open market. These transactions may include short sales, purchases to cover positions created by short sales and stabilizing transactions.

Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. Covered short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares of common stock from us in the offering. The underwriters may close out

any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option.

Naked short sales are any sales in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if underwriters are concerned that there may be downward pressure on the price of the shares in the open market prior to the completion of the offering.

Stabilizing transactions consist of various bids for or purchases of our common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may impose a penalty bid. This occurs when a particular underwriter repays to the other underwriters a portion of the underwriting discount received by it because the representatives of the underwriters have repurchased shares sold by or for the account of that underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions may have the effect of preventing or slowing a decline in the market price of our common stock. Additionally, these purchases, along with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on The NASDAQ Global Market, in the over-the-counter market or otherwise.

A prospectus in electronic format is being made available on Internet web sites maintained by one or more of the lead underwriters of this offering and may be made available on web sites maintained by other underwriters. Other than the prospectus in electronic format, the information on any underwriter's web site and any information contained in any other web site maintained by an underwriter is not part of the prospectus or the registration statement of which the prospectus forms a part.

Pricing of this Offering

Prior to this offering, there has been no public market for our common stock. Consequently, the initial public offering price of our common stock will be determined by negotiation among us and the representatives of the underwriters. Among the primary factors that will be considered in determining the public offering price are:

- prevailing market conditions;
- our results of operations in recent periods;
- the present stage of our development;
- the market capitalizations and stages of development of other companies that we and the representatives of the underwriters, believe to be comparable to our business; and
- estimates of our business potential.

European Economic Area

In relation to each member state of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the Relevant Implementation Date) an offer of the shares to the public may not be made in that Relevant Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant Member State or,

where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that an offer to the public in that Relevant Member State of any shares may be made at any time under the following exemptions under the Prospectus Directive if they have been implemented in the Relevant Member State:

(a) to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;

(b) to any legal entity which has two or more of (i) an average of at least 250 employees during the last financial year; (ii) a total balance sheet of more than 43,000,000 and (iii) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts; or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive;

provided that no such offer of shares shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an “offer of shares to the public” in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

United Kingdom

Each underwriter has represented and agreed that (i) it has not offered or sold and, prior to the expiration of the period of six months from the closing date of this offering, will not offer or sell any shares of our common stock to persons in the United Kingdom except to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or otherwise in circumstances which have not resulted and will not result in an offer to the public in the United Kingdom within the meaning of the Public Offers of Securities Regulations 1995; (ii) it has complied with and will comply with all applicable provisions of the Financial Services Act 1986 with respect to anything done by it in relation to the shares of our common stock in, from or otherwise involving the United Kingdom; and (iii) it has only issued or passed on and will only issue or pass on in the United Kingdom, any document received by it in connection with the issue of the shares of our common stock to a person who is of a kind described in Article 11(3) of the Financial Services Act 1986 (Investment Advertisements) (Exemptions) Order 1996 or is a person to whom such document may otherwise lawfully be issued or passed on.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California. Latham & Watkins LLP, Costa Mesa, California, is acting as counsel to the underwriters. Members of Wilson Sonsini Goodrich & Rosati, Professional Corporation, and investment funds associated with that firm hold 48,925 shares of our common stock.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements at December 27, 2008 and December 31, 2009, and for each of the three fiscal years in the period ended December 31, 2009, as set forth in their report, which contains an explanatory paragraph describing conditions that raise substantial doubt about our ability to continue as a going concern as described in Note 1 of the notes to our consolidated financial statements included elsewhere in this prospectus. We have included our consolidated financial statements in the prospectus and elsewhere in the registration statement in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information about us and the common stock offered hereby, we refer you to the registration statement and the exhibits and schedules filed thereto. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. Upon completion of this offering, we will be required to file periodic reports, proxy statements, and other information with the SEC pursuant to the Securities Exchange Act of 1934. You may read and copy this information at the Public Reference Room of the SEC, 100 F. Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy statements and other information about issuers, like us, that file electronically with the SEC. The address of that site is http://www.sec.gov.

FLUIDIGM CORPORATION

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders
Fluidigm Corporation

We have audited the accompanying consolidated balance sheets of Fluidigm Corporation as of December 27, 2008 and December 31, 2009, and the related consolidated statements of operations, convertible preferred stock and stockholders' deficit, and cash flows for each of the three fiscal years in the period ended December 31, 2009. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Fluidigm Corporation at December 27, 2008 and December 31, 2009, and the consolidated results of its operations and its cash flows for each of the three fiscal years in the period ended December 31, 2009, in conformity with U.S. generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that Fluidigm Corporation will continue as a going concern. As more fully described in Note 1 to the financial statements, the Company's recurring losses, operating cash flow deficiencies, and total stockholders' deficit raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters also are described in Note 1. The December 31, 2009 financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

/s/ Ernst & Young LLP

Palo Alto, California
December 3, 2010

FLUIDIGM CORPORATION

CONSOLIDATED BALANCE SHEETS
(In thousands, except per share amounts)

	December 27, 2008	December 31, 2009
ASSETS		
Current assets:		
Cash and cash equivalents	$ 17,796	$ 14,602
Accounts receivable (net of allowances of $0 and $103 at December 27, 2008 and December 31, 2009, respectively)	4,706	8,690
Inventories	5,456	3,945
Prepaid expenses and other current assets	1,267	1,246
Total current assets	29,225	28,483
Restricted cash	256	256
Property and equipment, net	2,777	1,930
Other assets	96	1,484
Total assets	$ 32,354	$ 32,153
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 2,860	$ 2,224
Accrued compensation and related benefits	1,543	1,343
Other accrued liabilities	1,531	2,188
Deferred revenue, current portion	1,412	758
Long-term debt, current portion	1,034	—
Convertible preferred stock warrants	141	616
Total current liabilities	8,521	7,129
Deferred revenue, net of current portion	312	258
Long-term debt, net of current portion	14,178	14,461
Other liabilities	144	79
Total liabilities	23,155	21,927
Commitments and contingencies		
Convertible preferred stock issuable in series: $0.0035 par value, 19,233 shares authorized, 16,626 and 17,713 shares issued and outstanding as of December 27, 2008 and December 31, 2009, respectively; aggregate liquidation preference of $188,246 as of December 31, 2009	167,538	183,845
Stockholders' deficit:		
Common stock: $0.0035 par value, 28,484 shares authorized, 2,898 and 3,219 shares issued and outstanding as of December 27, 2008 and December 31, 2009, respectively	10	11
Additional paid-in capital	5,504	9,298
Accumulated other comprehensive loss	(556)	(503)
Accumulated deficit	(163,297)	(182,425)
Total stockholders' deficit	(158,339)	(173,619)
Total liabilities, convertible preferred stock and stockholders' deficit	$ 32,354	$ 32,153

See accompanying notes.

FLUIDIGM CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share amounts)

	Year Ended		
	December 29, 2007	December 27, 2008	December 31, 2009
Revenue:			
Product revenue	$ 4,451	$ 13,364	$ 23,599
Collaboration revenue	460	70	—
Grant revenue	2,364	1,913	1,813
Total revenue	7,275	15,347	25,412
Costs and expenses:			
Cost of product revenue	3,514	8,364	11,486
Research and development	14,389	14,015	12,315
Selling, general and administrative	12,898	22,511	19,648
Total costs and expenses	30,801	44,890	43,449
Loss from operations	(23,526)	(29,543)	(18,037)
Interest expense	(2,790)	(2,031)	(2,876)
Gain (loss) from changes in the fair value of convertible preferred stock warrants, net	(245)	769	(135)
Interest income	1,140	766	37
Other income (expense), net	75	393	1,833
Loss before income taxes	(25,346)	(29,646)	(19,178)
(Provision) benefit for income taxes	(105)	147	50
Net loss	$ (25,451)	$ (29,499)	$ (19,128)
Net loss per share of common stock, basic and diluted	$ (9.21)	$ (10.32)	$ (6.37)
Shares used in computing net loss per share of common stock, basic and diluted	2,765	2,859	3,004
Pro forma net loss per share of common stock, basic and diluted (unaudited)			$ (0.96)
Shares used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)			19,710

See accompanying notes.

FLUIDIGM CORPORATION

CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT

(In thousands, except per share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount				
Balance as of January 1, 2007	12,367	$112,295	2,714	$ 9	$ 2,108	$ (17)	$ (108,272)	$ (106,172)
Cumulative effect of change in accounting principle	—	—	—	—	—	—	(75)	(75)
Issuance of common stock upon exercise of stock options for cash and for vesting of stock options that were exercised early	—	—	85	1	146	—	—	147
Issuance of Series E convertible preferred stock for cash at $14.00 per share, net of issuance costs of $1,189	2,650	35,911	—	—	—	—	—	—
Issuance of common stock for services	—	—	30	—	145	—	—	145
Stock-based compensation expense	—	—	—	—	708	—	—	708
Issuance of Series D convertible preferred stock upon conversion of promissory note at $9.80 per share	331	3,240	—	—	—	—	—	—
Issuance of Series E convertible preferred stock upon conversion of promissory notes at $12.60 per share	844	10,636	—	—	—	—	—	—
Beneficial conversion feature for convertible promissory notes	—	—	—	—	485	—	—	485
Comprehensive loss:								
Foreign currency translation adjustment	—	—	—	—	—	(107)	—	(107)
Unrealized loss on available-for-sale securities	—	—	—	—	—	(11)	—	(11)
Net loss	—	—	—	—	—	—	(25,451)	(25,451)
Total comprehensive loss								(25,569)
Balance as of December 29, 2007	16,192	$162,082	2,829	$ 10	$ 3,592	$ (135)	$ (133,798)	$ (130,331)

FLUIDIGM CORPORATION

CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT—(Continued)
(In thousands, except per share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount				
Balance as of December 29, 2007	16,192	$162,082	2,829	$ 10	$ 3,592	$ (135)	$ (133,798)	$ (130,331)
Issuance of common stock upon exercise of stock options for cash and for vesting of stock options that were exercised early	—	—	106	—	180	—	—	180
Stock-based compensation expense	—	—	—	—	2,022	—	—	2,022
Repurchase of common stock in exchange for payment of related-party note receivable	—	—	(37)	—	(290)	—	—	(290)
Issuance of Series E convertible preferred stock upon conversion of promissory notes at $12.60 per share	430	5,414	—	—	—	—	—	—
Issuance of Series C convertible preferred stock at $7.63 per share upon net-share exercise of warrants	4	42	—	—	—	—	—	—
Comprehensive loss:								
Foreign currency translation adjustment	—	—	—	—	—	(433)	—	(433)
Unrealized gain on available-for-sale securities	—	—	—	—	—	12	—	12
Net loss	—	—	—	—	—	—	(29,499)	(29,499)
Total comprehensive loss								(29,920)
Balance as of December 27, 2008	16,626	$167,538	2,898	$ 10	$ 5,504	$ (556)	$ (163,297)	$ (158,339)

FLUIDIGM CORPORATION

CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT—(Continued)
(In thousands, except per share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount				
Balance as of December 27, 2008	16,626	$167,538	2,898	$ 10	$ 5,504	$ (556)	$ (163,297)	$ (158,339)
Issuance of common stock upon exercise of stock options for cash and for vesting of stock options that were exercised early	—	—	34	—	53	—	—	53
Stock-based compensation expense	—	—	—	—	2,111	—	—	2,111
Issuance of common stock to licensee	—	—	50	—	118	—	—	118
Issuance of common stock upon conversion of preferred stock	(237)	(1,513)	237	1	1,512	—	—	1,513
Issuance of Series E convertible preferred stock for cash at $14.00 per share, net of issuance costs of $90	536	6,944	—	—	—	—	—	—
Issuance of Series E convertible preferred stock upon conversion of promissory note at $14.00 per share, net of issuance costs of $157	788	10,876	—	—	—	—	—	—
Comprehensive loss:								
Foreign currency translation adjustment	—	—	—	—	—	53	—	53
Net loss	—	—	—	—	—	—	(19,128)	(19,128)
Total comprehensive loss								(19,075)
Balance as of December 31, 2009	17,713	$183,845	3,219	$ 11	$ 9,298	$ (503)	$ (182,425)	$ (173,619)

See accompanying notes.

FLUIDIGM CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended		
	December 29, 2007	December 27, 2008	December 31, 2009
Operating activities			
Net loss	$ (25,451)	$ (29,499)	$ (19,128)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,643	1,497	1,632
Stock-based compensation expense	708	2,022	2,111
Loss (gain) from changes in the fair value of convertible preferred stock warrants, net	245	(769)	135
Loss (gain) on sales of property and equipment	20	14	(97)
Amortization of debt discount and issuance cost	495	470	308
Issuance of common stock for services	145	—	—
Gain from sublicense of technology	—	—	(1,807)
Changes in assets and liabilities:			
Accounts receivable	(135)	(3,278)	(3,999)
Inventories	(2,460)	(20)	1,510
Prepaid expenses and other assets	(1,552)	1,104	91
Accounts payable	1,537	135	(637)
Deferred revenue	1,618	(1,690)	(707)
Other liabilities	1,428	1,294	1,075
Net cash used in operating activities	(21,759)	(28,720)	(19,513)
Investing activities			
Proceeds from disposal of property and equipment	—	—	111
Purchases of property and equipment	(973)	(910)	(799)
Purchases of available-for-sale securities	(6,286)	(4,511)	—
Sales of available-for-sale securities	—	3,032	—
Maturities of available-for-sale securities	500	7,765	—
Restricted cash	19	625	—
Net cash (used in) provided by investing activities	(6,740)	6,001	(688)
Financing activities			
Proceeds from issuance of convertible promissory notes, net of issuance costs	5,000	—	10,510
Proceeds from issuance of convertible preferred stock, net of issuance costs	35,911	—	7,410
Proceeds from exercise of stock options	147	180	53
Proceeds from long-term debt	—	10,000	—
Repayment of long-term debt	(3,503)	(3,855)	(1,034)
Net cash provided by financing activities	37,555	6,325	16,939
Effect of exchange rate changes on cash and cash equivalents	3	113	68
Net increase (decrease) in cash and cash equivalents	9,059	(16,281)	(3,194)
Cash and cash equivalents as of beginning of year	25,018	34,077	17,796
Cash and cash equivalents as of end of year	$ 34,077	$ 17,796	$ 14,602
Supplemental disclosures of cash flow information			
Cash paid for interest	$ 1,523	$ 1,483	$ 1,940
Conversion of convertible promissory notes and accrued interest into convertible preferred stock	$ 13,876	$ 5,414	$ 10,876
Preferred stock investment received in exchange for technology license	$ —	$ —	$ 1,340
Issuance of preferred stock warrants in connection with long-term debt	$ —	$ 484	$ 76
Issuance of preferred stock warrants in connection with convertible promissory notes	$ —	$ —	$ 262

See accompanying notes.

FLUIDIGM CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
December 31, 2009

1. Description of Business

Fluidigm Corporation (the Company) was incorporated in the state of California on May 19, 1999, to commercialize microfluidic technology initially developed at the California Institute of Technology. In July 2007, the Company was reincorporated in Delaware. The Company's headquarters are located in South San Francisco, California.

The Company develops, manufactures and markets microfluidic systems in the life science and agricultural biotechnology (Ag-Bio) industries. The Company's proprietary microfluidic systems consist of instruments and consumables, including chips and reagents. The Company's microfluidic systems are designed to simplify experimental workflow, increase throughput, reduce costs, and provide quality data. The Company markets systems and consumables to leading pharmaceutical and biotechnology companies, academic institutions, diagnostic laboratories, and Ag-Bio companies.

Going Concern

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern. The Company has incurred recurring losses and operating cash flow deficiencies. As of December 31, 2009, the Company had a total stockholders' deficit of $182.4 million. The Company has historically experienced negative cash flows from operating activities as it has expanded its business and built its infrastructure and this may continue in the future. If the Company's cash resources are insufficient to satisfy its future cash requirements, the Company may be required to issue convertible debt or equity to raise additional capital. If the Company raises additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to its technologies or its products, or grant licenses on terms that are not favorable to the Company.

The Company is exploring its financing alternatives. If the Company is unable to raise adequate funds, it may have to liquidate some or all of its assets, or delay, reduce the scope of or eliminate some or all of its development programs. If the Company does not have, or is not able to obtain, sufficient funds, it may have to delay development or commercialization of its products or license to third parties the rights to commercialize products or technologies that it would otherwise seek to commercialize. In addition, the Company may have to reduce marketing, customer support or other resources devoted to its products or cease operations. Any of these factors could harm the Company's operating results.

The Company may be unable to raise additional capital or to do so on terms that are favorable, depending upon capital market and overall economic conditions. Sale of convertible debt securities or additional equity could result in substantial dilution to the Company's stockholders.

These factors raise substantial doubt about the Company's ability to continue as a going concern. The accompanying financial statements do not include any adjustments that might result from the outcome of these uncertainties.

Subsequent Events

The Company has evaluated subsequent events after the balance sheet date of December 31, 2009 through December 3, 2010, the date of the filing of the consolidated financial statements.

FLUIDIGM CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
December 31, 2009

2. Summary of Significant Accounting Policies

Basis of Presentation and Consolidation

The accompanying consolidated financial statements of the Company have been prepared in conformity with U.S. generally accepted accounting principles and include the accounts of the Company and its wholly-owned subsidiaries. The Company has wholly-owned subsidiaries in Singapore, the Netherlands, Japan, France, and the United Kingdom. All subsidiaries, except for Singapore, use their local currency as their functional currency. The Singapore subsidiary uses the U.S. dollar as its functional currency. All intercompany transactions and balances have been eliminated in consolidation.

Fiscal Year

The Company's 2007 and 2008 fiscal years were based on a 52- or 53-week convention for its fiscal years and, therefore, the 2007 fiscal year ended on December 29, 2007 (2007) and the 2008 fiscal year ended on December 27, 2008 (2008). During 2009, the Company adopted the calendar year as its fiscal year and, accordingly, the 2009 fiscal year ended on December 31, 2009 (2009).

Use of Estimates

The preparation of financial statements in accordance with US generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. The Company bases its estimates on historical experience and on various other assumptions believed to be reasonable, which together form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ materially from these estimates and could have a material adverse effect on the Company's consolidated financial statements.

Foreign Currency

Assets and liabilities of non-U.S. subsidiaries that use the local currency as their functional currency are translated into U.S. dollars at exchange rates in effect at the balance sheet date with the resulting translation adjustments recorded in a separate component of accumulated other comprehensive loss within stockholders' deficit. Income and expense accounts are translated at average exchange rates during the year. Net losses from foreign currency translation adjustments were $107,000 and $433,000 during 2007 and 2008, respectively. During 2009, net gain from foreign currency translation adjustment was $53,000. Foreign currency transaction gains and losses are recognized in other income (expense), net in the accompanying consolidated statements of operations. The Company had net foreign currency transaction gains of $72,000 and $386,000 during 2007 and 2008, respectively, and net foreign currency transaction losses of $89,000 during 2009.

Cash and Cash Equivalents

The Company considers all highly liquid financial instruments with maturities at the time of purchase of three months or less to be cash equivalents. Cash and cash equivalents may consist of cash on deposit with banks, money market funds, commercial paper, corporate notes, and notes from government-sponsored agencies.

Available-for-Sale Securities

Available-for-sale securities are comprised of corporate notes and notes from government-sponsored agencies. Investments classified as "available-for-sale" are recorded at estimated fair value, as determined by

quoted market rates, in the accompanying consolidated balance sheets, with any unrealized gains and losses reported in stockholders' deficit as a component of accumulated other comprehensive loss. Realized gains and losses and declines in the fair value of available-for-sale securities below their cost that are deemed to be "other than temporary" are reflected in interest income. No "other than temporary" unrealized losses have been incurred to date, and realized gains and losses were immaterial during the years presented. The cost of securities sold is based on the specific-identification method.

Restricted Cash

The Company had restricted cash balances of $256,000 as of December 27, 2008 and December 31, 2009. Included in restricted cash are amounts that collateralize the Company's standby letters of credit issued under operating lease agreements for its office facilities.

Fair Value of Financial Instruments

The carrying values of the Company's financial instruments, including accounts receivable, restricted cash, and accounts payable, approximated their fair values due to the short period of time to maturity or repayment. As a basis for considering fair value, the Company follows a three-tier value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level I: observable inputs such as quoted prices in active markets;

Level II: inputs other than quoted prices in active markets that are observable either directly or indirectly; and

Level III: unobservable inputs in which there is little or no market data, which requires the Company to develop its own assumptions.

This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. The Company's cash equivalents are classified as Level I because they are valued using quoted market prices. The Company's convertible preferred stock warrants are valued using Level III inputs.

Changes in the value of convertible preferred stock warrants were as follows (in thousands):

Fair value as of December 30, 2007	$ 468
Issuances	442
Change in fair value	(769)
Fair value as of December 27, 2008	$ 141
Issuances	340
Change in fair value	135
Fair value as of December 31, 2009	$ 616

Valuation of convertible preferred stock warrants is discussed in Note 8.

FLUIDIGM CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
December 31, 2009

Accounts Receivable

Trade accounts receivable are recorded at net invoice value. The Company reviews its exposure to accounts receivable and reserves specific amounts if collectability is no longer reasonably assured based on historical experience and specific customer collection issues. The Company evaluates such reserves on a regular basis and adjusts its reserves as needed. At December 31, 2009, the Company had reserves for accounts receivable of $103,000. Reserves for accounts receivable were not significant at December 27, 2008.

Concentrations of Business and Credit Risk

Financial instruments that potentially subject the Company to credit risk consist of cash, cash equivalents, available-for-sale securities, and accounts receivable. The Company maintains cash, cash equivalents, and available-for-sale securities with major financial institutions. The Company's cash, cash equivalents, and available-for-sale securities may consist of deposits held with banks, commercial paper, money market funds, and other highly liquid investments that may at times exceed federally insured limits. The Company performs periodic evaluations of its investments and the relative credit standing of these financial institutions and limits the amount of credit exposure with any one institution.

The Company generally does not require collateral to support credit sales. To reduce credit risk, the Company performs periodic credit evaluations of its customers. Revenue from one customer was 24% and 11% of total revenues for 2007 and 2008, respectively. No customer was greater than 10% of total revenues for 2009.

The Company's products include components that are currently available from a single source or a limited number of sources. The Company believes that other vendors would be able to provide similar components; however, the qualification of such vendors may require start-up time. In order to mitigate any adverse impacts from a disruption of supply, the Company attempts to maintain an adequate supply of critical limited-source components.

Inventories

Inventories are stated at the lower of cost (which approximates actual cost on a first-in, first-out method) or market. Inventories include raw materials, work-in-process, and finished goods that may also be used for research and development; such items are expensed when they are designated for use in research and development. Provisions, when required, for slow-moving, excess, and obsolete inventories are recorded to reduce inventory values from cost to their estimated net realizable values, based on product life cycle, development plans, product expiration, and quality issues.

Property and Equipment

Property and equipment, including leasehold improvements, are stated at cost less accumulated depreciation, which is calculated using the straight-line method over the estimated useful lives of the assets, which range from three to five years. Leasehold improvements are amortized using the straight-line method over the estimated useful lives of the assets or the remaining term of the lease, whichever is shorter.

The Company evaluates its long-lived assets for indicators of possible impairment when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. If any indicator of impairment exists, the Company assesses the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through undiscounted future operating cash flows. If impairment

is indicated, the Company measures the future discounted cash flows associated with the use of the asset and adjusts the value of the asset accordingly. The Company did not have any impairment of long lived assets.

Investment

The Company has a minority equity investment that is accounted for under the cost method of accounting. Under the cost method of accounting, investments in equity securities are carried at cost and are adjusted only for other-than-temporary declines in value. No such declines have been identified through December 31, 2009.

Reserve for Product Warranties

The Company generally provides a one-year warranty on its instruments. The Company reviews its exposure to estimated warranty expense associated with instrument sales and establishes an accrual based on historical product failure rates and actual warranty costs incurred. This expense is recorded as a component of cost of product revenue in the consolidated statements of operations. Warranty accruals and expenses were not significant for any period presented.

Revenue Recognition

The Company generates revenue from sales of its products, research and development contracts, collaboration agreements and government grants. The Company's products consist of instruments and consumables, including chips and reagents, related to its microfluidic systems. Product revenue includes services for instrument installation, training, and customer support services. The Company has also entered into collaboration, and research and development contracts and has received government grants to conduct research and development activities.

Revenue is recognized when all of the following criteria are met: persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price to the buyer is fixed or determinable and collectability is reasonably assured. The Company assesses collectability based on factors such as the customer's creditworthiness and past collection history, if applicable. If collection is not reasonably assured, revenue recognition is deferred until receipt of payment. The Company also assesses whether a price is fixed or determinable by, among other things, reviewing contractual terms and conditions related to payment terms. Delivery occurs when there is a transfer of title and risk of loss passes to the customer.

Product Revenue

Certain of the Company's sales contracts involve the delivery or performance of multiple products and services within contractually binding arrangements. Significant judgment is sometimes required to determine the appropriate accounting for such arrangements, including whether the deliverables specified in a multiple element arrangement should be treated as separate units of accounting for revenue recognition purposes and, if so, how the related sales price should be allocated among the elements, when to recognize revenue for each element, and the period over which revenue should be recognized. The Company does not sell software separately; however, the Company offers post-contract software support services for certain of its instruments containing software that is more than incidental to the functionality of the instruments. If an arrangement includes chips and instruments, the Company separates chip revenues from software related deliverables.

FLUIDIGM CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
December 31, 2009

During the third quarter of 2009, the Company began shipping instruments in fully assembled and calibrated form and concluded that installation was no longer essential to their functionality. As a result, beginning in the fourth quarter of 2009, the Company began recognizing instrument revenues upon delivery assuming all other applicable revenue recognition criteria have been satisfied. Previously, instrument revenue was recognized upon installation assuming all other applicable revenue recognition criteria have been satisfied.

During the third quarter of 2008, the Company established fair value for post-contract software support related to its BioMark instrument. As a result, beginning in the third quarter of 2008, the Company recognized revenue for the fair value of a BioMark instrument upon installation. Previously, revenue from BioMark instruments was deferred and recognized ratably over the post-contract support period. The corresponding costs of products related to multiple element revenue arrangements are recognized consistent with the related revenue recognition.

The Company evaluates whether a delivered element has value on a stand-alone basis prior to delivery of the remaining elements by determining whether separate sales of such undelivered elements exist or whether the undelivered elements are essential to the functionality of the delivered elements. The Company recognizes revenue for delivered elements only when the fair values of undelivered elements are known. The Company evaluates whether there is vendor-specific objective evidence, or VSOE, of fair value of the undelivered elements, determined by reference to stand-alone sales of such items. If the fair value of any undelivered element related to instruments and software included in a multiple element arrangement cannot be objectively determined, revenue will be deferred until all elements are delivered, or until fair value can objectively be determined for any remaining undelivered elements.

The Company's products are sold without the right of return. Accruals are provided for estimated warranty expenses at the time the associated revenue is recognized. Amounts received in advance of when revenue recognition criteria are met are classified as deferred revenue in the consolidated balance sheets.

Collaboration Revenue

The Company has entered into collaboration and research and development agreements with third parties, including government entities that generally provide the Company with up-front and periodic milestone fees or fees based on agreed-upon rates for time incurred by the Company's research staff. Upfront fees are generally recognized over the term of the agreement; milestone fees are generally recognized when the milestones are achieved; and fees based on agreed upon rates for time incurred by the Company's research staff are recognized as time is incurred. The Company evaluates whether these arrangements contain multiple units of accounting by evaluating whether delivered elements have value on a stand-alone basis and whether there is objective and reliable evidence of fair value of the undelivered items. During 2007 and 2008, the Company concluded that these arrangements consisted of a single unit of accounting, namely, research and development services. Accordingly, the Company recognizes fees received under such arrangements over the period services are performed. Costs associated with research and development agreements are included in research and development expenses in the consolidated statements of operations. During 2009, there were no such arrangements.

Grant Revenue

The Company receives grants from various governmental entities for research and related activities. Grants provide the Company with incentive payments for certain types of research and development activities performed over a contractually defined period. Grant revenue is recognized in the period during which the related costs are incurred, provided that the conditions under which the grants were provided have been met and the Company has only perfunctory obligations outstanding. Amounts received in advance of revenue recognition are classified as

deferred revenue in the consolidated balance sheets. Costs associated with grants are included in research and development expenses in the consolidated statements of operations.

Shipping and Handling Costs

Shipping and handling costs incurred for product shipments are included within cost of product revenue in the consolidated statements of operations.

Research and Development

The Company records research and development expenses in the period incurred. Research and development expenses consist of personnel costs, independent contractor costs, prototype and materials expenses, allocated facilities and information technology expenses and related overhead expenses.

Advertising Costs

The Company expenses advertising costs as incurred. The Company incurred advertising costs of $701,000, $1,117,000 and $747,000 during 2007, 2008 and 2009, respectively.

Income Taxes

The Company uses the asset and liability method to account for income taxes, whereby deferred income taxes reflect the impact of temporary differences for items recognized for financial reporting purposes over different periods than for income tax purposes. Valuation allowances are provided when the expected realization of deferred tax assets does not meet a “more likely than not” criterion.

The Company recognizes the financial statement effects of a tax position when it is more likely than not, based on the technical merits, that the position will be sustained upon examination. On January 1, 2007, the Company adopted new accounting guidance related to uncertain tax positions that resulted in a charge of $75,000 as a cumulative effect of a change in accounting principle in accumulated deficit. Any interest and penalties related to uncertain tax positions will be reflected in income tax expense.

Stock-Based Compensation

The Company adopted the fair value method of accounting for stock options granted to employees beginning January 1, 2006 using the prospective-transition method. Under the prospective-transition method, the Company applies the intrinsic value method to employee equity awards outstanding at the date of the Company’s adoption of the fair value method. Any compensation costs recognized consist of: (a) compensation cost for all stock-based awards granted prior to, but not vested, as of December 31, 2005 based on the intrinsic value method and (b) compensation cost for all stock-based awards granted or modified subsequent to December 31, 2005, net of estimated forfeitures, based on the grant date fair value. The Company recognizes stock-based compensation expense on a straight-line basis over the requisite service periods. For performance-based stock options, the Company recognizes stock-based compensation expense over the requisite service period using the accelerated attribution method.

The Company accounts for stock options issued to non-employees based on the fair value of the awards. The non-employee options are subject to periodic reevaluation over their vesting term with changes in fair value recognized in the consolidated statements of operations.

Comprehensive Loss

Comprehensive loss is comprised of net loss and other comprehensive loss. Other comprehensive loss includes unrealized gains and losses on the Company's available-for-sale securities and foreign currency translation adjustments. Total comprehensive loss for all periods presented has been disclosed in the consolidated statements of convertible preferred stock and stockholders' deficit.

Accumulated other comprehensive loss consists of the following (in thousands):

	December 29, 2007	December 27, 2008	December 31, 2009
Unrealized loss on available-for-sale securities	$ (12)	$ —	$ —
Foreign currency translation adjustment	(123)	(556)	(503)
	$ (135)	$ (556)	$ (503)

Convertible Preferred Stock Warrants

Freestanding warrants to purchase the Company's convertible preferred stock are valued at fair value and classified as liabilities in the consolidated balance sheets and are carried at fair value because the warrants may conditionally obligate the Company to transfer assets at some point in the future. The warrants are subject to remeasurement at each balance sheet date and any change in fair value is recognized in the consolidated statements of operations. The Company will continue to adjust this liability for changes in fair value until the earlier of the exercise or expiration of the warrants, the completion of a deemed liquidation event, conversion of preferred stock into common stock, or until the convertible preferred stockholders can no longer trigger a deemed liquidation event. At that time, the convertible preferred stock warrant liabilities will be reclassified to convertible preferred stock or additional paid-in capital.

Net Loss per Share of Common Stock

The Company's basic net loss per share of common stock is calculated by dividing the net loss by the weighted-average number of shares of common stock outstanding for the period. The weighted-average number of shares of common stock used to calculate the Company's basic net loss per share of common stock excludes shares subject to repurchase rights related to stock options that were exercised prior to vesting, as such shares are not deemed to be issued for accounting purposes until the related stock options vest. The diluted net loss per share of common stock is computed by dividing the net loss by the weighted-average number of potential common shares outstanding for the period determined using the treasury-stock method. For purposes of this calculation, convertible preferred stock, options to purchase common stock, common stock subject to repurchase, warrants to purchase convertible preferred stock, and shares of convertible preferred stock subject to conversion of the Company's convertible promissory notes are considered to be potential common shares but have been excluded from the calculation of diluted net loss per share of common stock, as their effect is anti-dilutive.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
December 31, 2009

The following potential common shares were excluded from the computation of diluted net loss per share of common stock for the periods presented because including them would have been anti-dilutive (in thousands).

	December 29, 2007	December 27, 2008	December 31, 2009
Convertible preferred stock	16,192	16,626	17,713
Options to purchase common stock	2,124	2,285	2,666
Common stock subject to repurchase	10	3	1
Warrants to purchase convertible preferred stock	200	216	669
Convertible promissory notes convertible into shares of convertible preferred stock	418	—	—

Unaudited Pro Forma Net Loss per Share of Common Stock

In December 2010, the Company's board of directors authorized the filing of a registration statement with the Securities and Exchange Commission (SEC) for the Company to sell shares of common stock to the public. Pro forma basic and diluted net loss per share of common stock have been computed in contemplation of the completion of this offering and give effect to the conversion of all the Company's outstanding convertible preferred stock into common stock. Also, the numerator in the pro forma basic and diluted net loss per share calculation has been adjusted to remove gains and losses resulting from changes in the fair value of convertible preferred stock warrants as these will become warrants to purchase shares of the Company's common stock upon a qualifying initial public offering. The following table reconciles the calculation of pro forma loss per share (unaudited, in thousands, except per share amounts):

	December 31, 2009
Pro Forma:	
Numerator:	
Net loss	$ (19,128)
Change in fair value of convertible preferred stock warrants	135
Net loss used in computing pro forma net loss per share of common stock, basic and diluted	$ (18,993)
Denominator:	
Shares used in computing net loss per share of common stock, basic and diluted	3,004
Pro forma adjustments to reflect assumed conversion of convertible preferred stock	16,706
Shares used in computing pro forma net loss per share of common stock, basic and diluted	19,710
Pro forma net loss per share of common stock, basic and diluted	$ (0.96)

Recent Accounting Pronouncements

Revenue Arrangements with Multiple Deliverables

In September 2009, the FASB ratified authoritative accounting guidance regarding revenue recognition for arrangements with multiple deliverables. The guidance allows the use of management's best estimate of selling price for individual elements of an arrangement when vendor specific objective evidence, or third-party evidence

is unavailable. The guidance also requires arrangement consideration to be allocated at the inception of the arrangement to all deliverables using the relative-selling-price method and eliminates the use of the residual method of allocation. The guidance is effective for annual periods beginning January 1, 2011, with early adoption permitted. The Company is currently evaluating the impact of this guidance on its consolidated financial statements.

Revenue Arrangements with Software Elements

In October 2009, the FASB ratified authoritative accounting guidance that modifies the scope of the software revenue recognition guidance to exclude tangible products that contain both software and non-software components that function together to deliver the product's essential functionality. The guidance is effective for annual periods beginning January 1, 2011, with early adoption permitted. This guidance must be adopted in the same period an entity adopts the amended guidance for revenue arrangements with multiple deliverables guidance described in the preceding paragraph. The Company is currently evaluating the impact of this guidance on its consolidated financial statements.

Milestone Method of Revenue Recognition

In March 2010, the FASB ratified the milestone method of revenue recognition. Under this new standard, an entity can recognize contingent consideration earned from the achievement of a substantive milestone in its entirety in the period in which the milestone is achieved. A milestone is defined as an event (i) that can only be achieved based in whole or in part on either the entity's performance or on the occurrence of a specific outcome resulting from the entity's performance (ii) for which there is substantive uncertainty at the date the arrangement is entered into that the event will be achieved and (iii) that would result in additional payments being due to the entity. The milestone method of revenue recognition is effective for fiscal years beginning on or after June 15, 2010 and early adoption is permitted. The Company is currently evaluating the impact of this guidance on its consolidated financial statements.

3. License, Development, Collaboration, and Grant Agreements

License Agreements

In March 2003, the Company entered into a license agreement to obtain an exclusive worldwide license for certain technology regarding nanovolume crystallization arrays. The Company may, in its sole discretion, cancel the license agreement with 30-days notice; otherwise, the license terminates at the end of the life of the last licensed patent to expire. Under the terms of the agreement, the Company is obligated to issue up to $2,100,000 in value of shares of the Company's common or convertible preferred stock if the Company achieves certain milestones. As a result of achieving one of these milestones during 2006, the Company issued 61,223 shares of Series D convertible preferred stock valued at $9.80 per share for an aggregate value of $597,000, net of issuance costs, and recorded this amount as research and development expense. The milestones required to issue the remaining $1,503,000 of shares of the convertible preferred stock due under the agreement have not been achieved as of December 31, 2009.

During 2003, the Company also entered into a separate research sponsorship agreement under which the Company agreed to pay a total of $900,000 over five years in 20 quarterly installments of $45,000 each to sponsor certain research. These quarterly payments were recorded as research and development expenses. As of December 27, 2008, the entire $900,000 has been paid and the agreement terminated in fiscal 2008 following payment of the final installment.

In December 2003, the Company entered into a license agreement to obtain a nonexclusive worldwide license for certain technology regarding submicroliter protein crystallization. The Company may, in its sole discretion, cancel the agreement with 30-days notice; otherwise, the license terminates at the end of the life of the last licensed patent to expire. Pursuant to the agreement, the Company made payments for nonrefundable license fees, each in the amount of $250,000, in January 2006 and January 2007. Also pursuant to this agreement, the Company began making quarterly payments in the amount of $25,000 starting in the first quarter of 2007. These quarterly payments, which we have made through December 31, 2009 and which are scheduled to continue until the agreement is terminated, could increase in future periods if the Company meets certain sales volumes. The nonrefundable license fee and quarterly payments were recorded as research and development expense.

In November 2009, the Company entered into an agreement to grant a sub-license to certain intellectual property previously licensed by the Company from a third party (Licensor). As consideration, the Company received shares of the sub-licensee's preferred stock (Investment), with an estimated fair value of $1,676,000. The Investment is accounted for under the cost method of accounting. The Company based its estimate of the fair value of the investment on a variety of factors including the sale of similar securities by the sub-licensee, with appropriate consideration taken for differences in liquidation preference of the securities and the sub-licensee's capital structure, and the Company's expectations about the performance and future operations of the sub-licensee.

Concurrently, the sub-licensee purchased 536,000 shares of the Company's convertible Series E convertible preferred stock (Series E stock) for cash of $14.00 per share for total cash proceeds of $7,500,000, which represented a premium of $466,000 over the then fair value of the Company's Series E stock. The fair value of the Company's Series E stock was determined based on comparable sales of such shares. Since the Company's Series E stock was sold as part of a multiple element arrangement for which the fair value of the sub-license was not known, the value of the Company's preferred stock and the value of the Investment were determined to be the most reliable measures of fair value for the exchanged assets. As a result, during the fourth quarter of 2009 the Company recognized other income of $2,142,000 representing the fair value of the Investment and the premium on the sale of the Series E stock.

Pursuant to the Company's agreement with the Licensor, the Company transferred 20% of its Investment to the Licensor and recorded the estimated fair value of the transferred shares, or $335,000 as other expense. At December 31, 2009, the carrying value of the Investment was $1,340,000, and is included in other assets in the Company's consolidated balance sheet.

Development Agreements

In June 2005, the Company entered into an agreement to develop an application area of interest. Under the agreement, the Company performed research and development services and manufactured prototype instruments. The agreement provided for total payments to the Company of $942,000, to be paid in installments over the 30-month life of the agreement. The Company determined that the research and development services and the manufacturing of prototype instruments should be accounted for as a combined unit of accounting, and revenue was recognized ratably over the estimated project period. The Company recognized revenue of $377,000 and $89,000 related to this agreement during 2007 and 2008, respectively. The agreement terminated during 2008.

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December 31, 2009

Grants

California Institute for Regenerative Medicine

In April 2009, the Company was awarded a grant from the California Institute for Regenerative Medicine in the amount of $750,000 to be earned over a two-year period. Under the grant, the Company designs and develops prototype microfluidic systems for use in stem cell research. The agreement provides for quarterly payments in the amount of $97,000 during the first year beginning on April 1, 2009 and quarterly payments of $90,000 during the second year. The grant revenue is recognized as the related research and development services are performed, and costs associated with this grant were reported as research and development expense during the period incurred. During 2009, the Company recognized grant revenue of $291,000 related to this agreement.

National Institutes of Health

In June 2006, the Company was awarded a government grant from the National Institutes of Health (NIH) in the amount of $1,048,000 to be earned over a two-year period. Under the grant, the Company performed research and development activities to design a diffraction capable screening chip. The agreement provided for quarterly reimbursement of the eligible research and development expenses including salaries, equipment, scientific consumables, and certain third-party costs. The grant revenue was recognized as the related services were performed and costs associated with this grant were reported as research and development expense in the period incurred. The Company recognized revenue of $606,000 and $258,000 during 2007 and 2008, respectively, under this grant. This agreement terminated in June 2008.

Singapore Economic Development Board

In October 2005, the Company entered into a letter agreement providing for up to SG$10.0 million (approximately US$7.1 million using the December 31, 2009 exchange rate) in grants from the Singapore Economic Development Board (EDB). The grants were payable for the period August 1, 2005 through July 31, 2010 in connection with the establishment and operation by Fluidigm Singapore, a wholly owned subsidiary of the Company, of a research, development and manufacturing center for chips in Singapore. Grant payments were calculated as a portion of qualifying expenses incurred in Singapore relating to salaries, overhead, outsourcing and subcontracting expenses, operating expenses and royalties paid. Fluidigm Singapore was required to submit incentive payment requests for qualifying expenditures on a quarterly basis along with reports regarding its compliance with the incentive payment conditions, as described below, through the end of the applicable quarter.

In January 2006, Fluidigm Singapore and EDB entered into a supplement to the October 2005 letter agreement. This supplement was entered into to create a process whereby Fluidigm Singapore and EDB would agree on new quarterly development targets at the start of each year, Fluidigm Singapore would submit to EDB a progress report and evidence of the achievement of targets on a quarterly basis and the parties would resolve any disagreements regarding the satisfaction of targets using an established procedure and the parties would be entitled to obtain a third party review of the incentive payment requests on a semi-annual rather than an annual basis.

In February 2007, Fluidigm Singapore entered into a second letter agreement with EDB which provided for up to an additional SG$3.7 million (approximately US$2.6 million using the December 31, 2009 exchange rate) in grants. The terms and conditions of this letter agreement are substantially the same as the October 2005 letter agreement with the exception of the size of the potential grant, the term of the agreement, and the specific levels of research, development, and manufacturing activities required to maintain eligibility for such grants. The primary focus of this letter agreement is the ongoing development and manufacture in Singapore of certain

instrumentation. This letter agreement applies to research, development, and manufacturing activity by Fluidigm Singapore in Singapore from June 1, 2006 through May 31, 2011.

Fluidigm Singapore's continued eligibility for such grants is subject to its compliance with the following conditions: increasing levels of research; its development and manufacturing activity in Singapore, including employment of specified numbers of research scientists and engineers; its incurrence of specified levels of research and development expenses in Singapore over the course of each calendar year; its use of local service providers; its manufacture in Singapore of the products developed in Singapore; and its achievement of certain targets relating to new product development or completion of specific manufacturing process objectives. These required levels of research, development, and manufacturing activity in Singapore and the associated increases from one year to the next are the result of negotiations between the parties and are generally consistent with the Company's business strategy for its Singapore operations. All ownership rights in the intellectual property developed by Fluidigm in Singapore remain with Fluidigm Singapore, and no such rights are conveyed to EDB under the agreements.

These agreements further provided EDB with the right to demand repayment of a portion of past grants in the event the Company did not meet its obligations under the agreements. Based on correspondence with EDB, the Company believes that it has fulfilled its obligations under the grants and it will, therefore, not have to repay any of the grant proceeds received through December 31, 2009.

The Company recognized revenue of $1,758,000, $1,654,000 and $1,522,000 related to EDB grants during 2007, 2008 and 2009, respectively. As of December 27, 2008 and December 31, 2009, the Company had deferred revenue of $378,000 and $144,000, respectively, related to incentive payments for equipment expenditures, which is being recognized ratably over the estimated useful life of the equipment of four years. As of December 27, 2008 and December 31, 2009, the Company had accounts receivable from EDB in the amounts of $328,000 and $666,000, respectively.

4. Balance Sheet Data

Cash Equivalents

The following are summaries of cash equivalents (in thousands):

	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value
As of December 31, 2009:				
Money market funds	$ 9,926	$ —	$ —	$ 9,926
Notes from government-sponsored agencies	2,286	—	—	2,286
	$ 12,212	$ —	$ —	$ 12,212
As of December 27, 2008:				
Money market funds	$ 13,413	$ —	$ —	$ 13,413

Inventories

Inventories consist of the following (in thousands):

	December 27, 2008	December 31, 2009
Raw materials	$ 2,727	$ 1,944
Work-in-process	705	121
Finished goods	2,024	1,880
	$ 5,456	$ 3,945

Property and Equipment

Property and equipment consists of the following (in thousands):

	December 27, 2008	December 31, 2009
Computer equipment and software	$ 1,488	$ 1,511
Laboratory and manufacturing equipment	8,735	8,820
Leasehold improvements	616	616
Office furniture and fixtures	372	379
	11,211	11,326
Less accumulated depreciation and amortization	(8,674)	(9,773)
Construction-in-progress	240	377
Property and equipment, net	$ 2,777	$ 1,930

Depreciation and amortization expense was $1,643,000, $1,497,000 and $1,632,000 for 2007, 2008 and 2009, respectively.

5. Long-Term Debt

In November 2002, the Company entered into a master security agreement with a lender under which the Company had drawn down $3,584,000 for the purchase of equipment. The loan, which was secured by the underlying equipment and a letter of credit, carried an interest rate between 8.0% and 10.5% per annum. In connection with this agreement, the Company issued warrants to the lender in 2004 to purchase 10,714 shares of Series D convertible preferred stock at $9.80 per share (see Note 8). The fair value of the warrants resulted in a $90,000 discount that was amortized to interest expense over the expected life of the debt. In February 2008, prior to the due date, the Company paid the outstanding principal balance, accrued interest, and a $41,000 prepayment fee in settlement of this debt. Upon settlement of this debt, the remaining unamortized discount was immediately recognized as interest expense.

Under the terms of a loan agreement entered into in March 2005 and amended in August 2006, the Company borrowed $13,000,000 for general corporate purposes (the 2005 Agreement). The 2005 Agreement was secured by the assets of the Company, excluding intellectual property but including any proceeds from the sale of intellectual property, bore interest at 9.75% per annum and was originally scheduled to mature in March 2010. In connection with the 2005 Agreement, the Company issued warrants to the lender to purchase 106,122 shares of Series D convertible preferred stock at $9.80 per share (see Note 8). The $104,000 fair value of the warrants resulted in a debt discount that is being amortized over the life of the borrowing.

In February 2008, the Company amended the 2005 Agreement to provide the Company with an additional $10,000,000 of borrowing availability for general corporate purposes (the 2008 Amendment). The $10,000,000 of additional availability under the 2008 Amendment carried interest at 11.5% per annum and was originally scheduled to mature in June 2011. In connection with the 2008 Amendment, the Company issued warrants to purchase 85,714 shares of Series E convertible preferred stock at $14.00 per share (see Note 8) to the lender. The $484,000 fair value of the warrants resulted in a debt discount that is being amortized over the life of the borrowing.

In March 2009, amounts outstanding under the 2005 Agreement and the 2008 Amendment were combined and amended (the 2009 Agreement) so as to extend the final repayment date to March 1, 2012 and to provide for an interest only period from March 2009 through February 2010. At the time of the 2009 Agreement, the combined principal balance outstanding under the two loans was $14,557,000. Amounts outstanding under the 2009 Agreement bear interest at 13.5% per annum. At the end of the interest only period, the Company will begin making monthly principal and interest payments of $612,000 with an additional final payment of $2,263,000. The additional final payment of $2,263,000 is being accreted using the effective interest method as interest expense through the amended maturity date of March 1, 2012. The 2009 Agreement requires a prepayment fee of 1.5% of the outstanding principal amount being prepaid. In connection with the 2009 Agreement, the Company issued a warrant to purchase 71,428 shares of Series E convertible preferred stock at $14.00 per share (see Note 8) to the lender. The fair value of the warrant resulted in a $76,000 discount that is being amortized over the expected life of the borrowing.

The Company recognized interest expense of $27,000, $76,000 and $179,000 during 2007, 2008 and 2009, respectively, related to the amortization of debt discounts. As of December 31, 2009, the Company was in compliance with all loan covenants or had obtained waivers through December 31, 2010 from the lender.

In June 2010, the Company amended the 2009 Agreement. See Note 15 for the scheduled principal payments under the amended loan and security agreement.

6. Commitments and Contingencies

Operating Leases

The Company leases its headquarters in South San Francisco, California, under multiple noncancelable lease agreements that expire through April 2015. These agreements include renewal options that provide the Company with the ability to extend the lease terms for an additional three years. The Company also leases office and manufacturing space under noncancelable leases in Singapore with various expiration dates through July 2013. The Company’s other operating leases are for office space in Japan and France and are on a month-to-month basis. The Company entered into a new lease agreement for its headquarters in South San Francisco, California in September 2010. See Note 15 for the schedule of future minimum lease payments under noncancelable operating leases.

The Company’s lease payments are expensed on a straight-line basis over the life of the lease. Rental expense under operating leases for 2007, 2008 and 2009 totaled $1,574,000, $1,580,000 and $1,915,000, respectively.

Indemnifications

From time to time, the Company has entered into indemnification provisions under certain of its agreements in the ordinary course of business, typically with business partners, customers, and suppliers. Pursuant to these

agreements, the Company may indemnify, hold harmless, and agree to reimburse the indemnified parties on a case-by-case basis for losses suffered or incurred by the indemnified parties in connection with any patent or other intellectual property infringement claim by any third party with respect to its products. The term of these indemnification provisions is generally perpetual from the time of the execution of the agreement. The maximum potential amount of future payments the Company could be required to make under these indemnification provisions is typically not limited to a specific amount. In addition, the Company has entered into indemnification agreements with its officers and directors. The Company has not incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. As of December 31, 2009, the Company had no accrued liabilities for these indemnification provisions.

7. Convertible Promissory Notes

Note and Warrant Purchase Agreement

In August 2009, the Company entered into a convertible Note and Warrant Purchase Agreement (Notes) with its existing investors to provide the Company with cash proceeds of $10,667,000. In connection with issuance of the Notes, the Company issued warrants to purchase 380,906 shares of Series E convertible preferred stock at $14.00 per share (see Note 8), which resulted in a $262,000 debt discount. The Notes were scheduled to mature on December 31, 2009 with interest accruing on the outstanding principal amount for the first 60 days at 1% per month and at 2% per month after the first 60 days, compounded monthly. The Notes' outstanding principal and accrued interest were convertible into preferred stock upon the occurrence of a qualified financing transaction or at the option of a majority of investors, as defined in the Note agreement.

In November 2009, the note holders agreed to convert the outstanding principal and accrued interest of $11,033,000 into 788,059 shares of Series E convertible preferred stock. The Company recognized $366,000 of interest expense related to the Notes and immediately expensed the remaining debt discount balance of $262,000.

BMSIF Convertible Notes

During 2005, the Company entered into a convertible note purchase agreement with the Biomedical Sciences Investment Fund Pte Ltd (BMSIF). BMSIF is wholly owned by EDB Investments Pte. Ltd., whose parent entity is EDB. Ultimately, each of these entities is controlled by the government of Singapore. In June 2006, the Company issued an unsecured convertible promissory note to BMSIF in the amount of $3,000,000 carrying an interest rate of 8% per year. In June 2007, pursuant to the conversion provisions of this agreement, the Company elected to convert the principal balance of $3,000,000 and accrued interest of $240,000 into 330,612 shares of Series D convertible preferred stock at $9.80 per share.

In August 2006, the Company entered into another convertible note purchase agreement with BMSIF. Under this agreement, BMSIF agreed to provide a $15,000,000 credit facility for general corporate purposes to be drawn down in three separate $5,000,000 tranches at an interest rate of 8% per year. In August and November 2006, the Company drew down two of the three tranches in exchange for unsecured convertible promissory notes of $5,000,000 each. In March 2007, BMSIF elected to convert the outstanding principal and accrued interest balance of $10,636,000 into 844,095 shares of Series E convertible preferred stock at $12.60 per share.

In April 2007, the Company drew down the third and final tranche of $5,000,000 that was available from BMSIF in exchange for an unsecured promissory note. In May 2008, BMSIF elected to convert the outstanding principal and accrued interest balance of $5,414,000 into 429,698 shares of Series E convertible preferred stock at $12.60 per share.

The BMSIF notes that were converted into Series E convertible preferred stock had a conversion price of $12.60 per share which was a discount to the estimated fair values of $12.98 and $14.00 per share for the Series E convertible preferred stock at the times of the borrowings. The intrinsic value of the embedded beneficial conversion option associated with each borrowing under the arrangement was measured as the difference between the conversion price and the fair value of Series E convertible preferred stock on the commitment date and the resulting debt discount was being amortized to interest expense over the two year contractual term of the debt. Upon conversion of the notes to convertible preferred stock, the remaining unamortized debt discount was immediately recognized as interest expense.

During 2007, the Company recognized debt discounts of $485,000 related to the beneficial conversion feature of the BMSIF notes. Amortization of the debt discounts resulted in interest expense of $468,000, and $280,000 during 2007, and 2008, respectively. All amounts due under the BMSIF notes were converted to preferred stock during 2008.

8. Convertible Preferred Stock Warrants

The Company has issued warrants to purchase shares of its convertible preferred stock at various times since 2001. The Company's convertible preferred stock warrants are generally exercisable immediately and can only be exercised for cash or net share settled. Changes in the fair value of the preferred shares into which the warrants are convertible do not affect the settlement amounts of the warrants. Freestanding warrants to purchase the Company's convertible preferred stock are valued at fair value and classified as liabilities in the consolidated balance sheets because the warrants may conditionally obligate the Company to transfer assets at some point in the future.

During 2009, the Company issued warrants to purchase 452,386 shares of Series E convertible preferred stock at $14.00 per share in connection with the 2009 Agreement (see Note 5) and the Note and Warrant Purchase Agreement with existing investors (see Note 7).

During 2008, warrants to purchase 57,142 shares of the Company's Series C convertible preferred stock expired unexercised. Upon expiration, the related warrant liability was eliminated and the change in fair value was included in other income (expense), net in the accompanying consolidated statement of operations.

During 2008, warrants to purchase 11,795 shares of the Company's Series C convertible preferred stock were exercised utilizing a cashless exercise option that allowed the holder to receive 4,692 shares of Series C convertible preferred stock.

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December 31, 2009

As of December 31, 2009, the following warrants were outstanding:

Issue Date	Reason for Grant	Series of Preferred Stock into which the Warrant is Exercisable	Number of Shares into which the warrant is Exercisable	Exercise Price per Share	Expiration
March 2002	Debt financing	Series C	5,000	$ 9.03	Earlier of (i) the closing of an acquisition of the Company or (ii) March 27, 2012
November 2002	Debt financing	Series C	8,859	$ 9.03	Earlier of (i) the closing of an acquisition of the Company or (ii) December 16, 2012
March 2004	Debt financing	Series D	10,714	$ 9.80	Earlier of (i) the closing of an acquisition of the Company or (ii) March 18, 2012
March 2005	Debt financing	Series D	53,061	$ 9.80	Earlier of (i) the closing of an acquisition of the Company or (ii) March 29, 2012
December 2005	Debt financing	Series D	53,061	$ 9.80	Earlier of (i) the closing of an acquisition of the Company or (ii) March 29, 2012
February 2008	Debt financing	Series E	28,572	$14.00	Earlier of (i) the closing of an acquisition of the Company or (ii) February 15, 2015
June 2008	Debt financing	Series E	57,142	$14.00	Earlier of (i) the closing of an acquisition of the Company or (ii) February 15, 2015
March 2009	Debt financing	Series E	71,428	$14.00	Earlier of (i) the closing of an acquisition of the Company or (ii) March 25, 2016
August 2009	Debt financing	Series E	380,906	$14.00	Earlier of (i) the closing of an acquisition of the Company or (ii) August 25, 2019
			668,743		

The following is a summary of the warrants to purchase convertible preferred stock outstanding and their fair values as of December 27, 2008 and December 31, 2009:

	Shares as of		Fair Value as of	
	December 27, 2008	December 31, 2009	December 27, 2008	December 31, 2009
Series C	13,859	13,859	$ 9,000	$ 5,000
Series D	116,836	116,836	60,000	33,000
Series E	85,714	538,048	72,000	578,000
	216,409	668,743	$ 141,000	$ 616,000

The fair values of outstanding convertible preferred stock warrants were estimated using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	2007	2008	2009
Expected volatility	49.7%	54.2%	68.1%
Expected life (equals the remaining contractual term)	2.8 years	4.4 years	7.3 years
Risk-free interest rate	3.2%	1.3%	3.1%
Dividend yield	0%	0%	0%

9. Convertible Preferred Stock

Convertible preferred stock was comprised of the following (in thousands):

	December 31, 2009			
	Shares Authorized	Shares Issued and Outstanding	Net Proceeds	Liquidation Preferences
Series A	779	657	$ 2,519	$ 2,530
Series B	1,846	1,835	11,413	11,434
Series C	4,816	4,619	41,517	41,710
Series D	3,989	3,772	36,611	36,965
Series E	7,803	6,830	91,785	95,607
	19,233	17,713	$183,845	$188,246

Upon certain change in control events that are outside of the control of the Company, including liquidation, sale, or transfer of control of the Company, holders of the convertible preferred stock can cause its redemption. Accordingly, these shares are considered contingently redeemable and therefore classified as temporary equity on the consolidated balance sheets instead of in stockholders' deficit. The Company has not adjusted the carrying values of the convertible preferred stock to their redemption values, since it is uncertain whether or when a redemption event will occur. The significant rights, privileges, and preferences of the convertible preferred stock are as follows:

Conversion

Each share of convertible preferred stock is convertible, at any time at the option of the holder, into common stock based upon a conversion rate of one share of common stock for each share of convertible preferred stock regardless of the series, subject to certain adjustments to the conversion price.

Conversion is automatic upon: (i) the closing of an underwritten initial public offering of the Company's common stock at an offering price of not less than $19.91 per share (appropriately adjusted for any stock splits, stock dividends, recapitalization, or similar events) and with aggregate gross proceeds of not less than $25,000,000, (ii) the closing of an underwritten initial public offering of the Company's common stock at an offering price of less than $19.91 per share (appropriately adjusted for any stock splits, stock dividends, recapitalization, or similar events) or with aggregate gross proceeds of less than $25,000,000 and written consent of the holders of two-thirds of all shares of convertible preferred stock voting together for such automatic conversion, or (iii) the written consent of the holders of two-thirds of all shares of convertible preferred stock voting together, except that the written consent of the holders of greater than two-thirds of all shares of Series E

convertible preferred stock voting separately is required for Series E convertible preferred stock to convert if such conversion is not in connection with the closing of an underwritten initial public offering of the Company's common stock.

Dividends

Holders of Series A, B, C, D, and E convertible preferred stock are entitled to noncumulative dividends of $0.38, $0.63, $0.91, $1.05, and $1.50 per share, respectively, if and when declared by the Board of Directors (adjusted for any stock splits, stock dividends, recapitalization, or similar events) and subject to the preferences described below. Holders of Series D and E convertible preferred stock shall be entitled to receive dividends, when and if declared, in preference and priority to any declaration or payment of dividends to holders of Series A, B, or C convertible preferred stock or common stock, other than for dividends payable in only common stock. Payments of any dividends to the holders of Series D and E convertible preferred stock shall be on a pro rata, pari passu basis in proportion to the entitled dividend rates for these respective series, as applicable. Holders of Series C convertible preferred stock shall be entitled to receive dividends, when and if declared, in preference and priority to any declaration or payment of dividends to holders of Series A and B convertible preferred stock or common stock, other than for dividends payable in only common stock. Holders of Series A and B convertible preferred stock shall be entitled to receive dividends, when and if declared, in preference and priority to any declaration or payment of dividends to holders of common stock, other than for dividends payable in only common stock. Payments of any dividends to the holders of Series A and B convertible preferred stock shall be on a pro rata, pari passu basis in proportion to the entitled dividend rates for these respective series, as applicable. No dividends have been declared or paid through December 31, 2009.

Liquidation Preferences

In the event of a liquidation, dissolution, or winding up of the Company, holders of Series E convertible preferred stock shall be entitled to receive a liquidation preference of $14.00 per share, together with any declared but unpaid dividends, prior to any payment or distribution to holders of Series A, B, C, or D convertible preferred stock or common stock.

After payment to the holders of Series E convertible preferred stock, holders of Series D convertible preferred stock shall be entitled to receive a liquidation preference of $9.80 per share, together with any declared but unpaid dividends, prior to any payment or distribution to holders of Series A, B, or C convertible preferred stock or common stock.

After payment to the holders of Series D convertible preferred stock, holders of Series C convertible preferred stock shall be entitled to receive a liquidation preference of $9.03 per share, together with any declared but unpaid dividends, prior to any payment or distribution to holders of Series A or B convertible preferred stock or common stock.

After payment to the holders of Series C convertible preferred stock, holders of Series B convertible preferred stock shall be entitled to receive a liquidation preference of $6.23 per share, together with any declared but unpaid dividends, prior to any payment or distribution to holders of Series A convertible preferred stock or common stock.

After payment to the holders of Series B convertible preferred stock, holders of Series A convertible preferred stock shall be entitled to receive a liquidation preference of $3.85 per share, together with any declared but unpaid dividends, prior to any payment or distribution to holders of common stock.

A change of control or a sale, transfer, or lease of all or substantially all of the assets of the Company is considered to be a liquidation event.

After the payment to the holders of convertible preferred stock of their respective liquidation preferences, the entire remaining assets of the Company shall be distributed on a pro rata basis to the holders of common stock.

Voting Rights

Holders of convertible preferred stock are entitled to the number of votes they would have upon conversion of their convertible preferred stock into common stock on the applicable record date. So long as 571,428 shares of Series D convertible preferred stock remain outstanding, the holders of Series D convertible preferred stock are entitled to elect two members to the Company's Board of Directors, and so long as 571,428 shares of Series C convertible preferred stock remain outstanding, the holders of Series C convertible preferred stock are entitled to elect three members to the Board of Directors. The holders of Series A, B, and E convertible preferred stock and the holders of common stock, voting together as a single class, are entitled to elect any additional members to the Board of Directors.

10. Stock-Based Compensation

2009 Equity Incentive Plan

On April 30, 2009, the Company's Board of Directors adopted the 2009 Equity Incentive Plan (the 2009 Plan) under which incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock and restricted stock units may be granted to Company employees, officers, directors, and consultants.

Incentive stock options and nonstatutory stock options granted under the 2009 Plan expire no later than ten years from the date of grant. The exercise price of each option granted to a participant shall be at least 110% of the fair value of the underlying common stock on the date of grant if, on the grant date, the participant owns stock representing more than 10% of the voting power of all classes of the Company's capital stock; otherwise, the exercise price shall be at least 100% of the fair value of the underlying common stock on the date of grant. The estimated fair value of the underlying common stock shall be determined by the Board of Directors until such time as the Company's common stock is listed on any established stock exchange or national market system. Generally, outstanding options vest at a rate of 25% on the first anniversary of the option grant date and ratably each month over the remaining 36 month period. The Company may grant options with different vesting terms from time to time.

The exercise price of each stock appreciation right shall be determined by the Board of Directors but will be no less than 100% of the estimated fair value of the underlying common stock on the date of grant. The stock appreciation rights expire upon the date determined by the Board of Directors but no later than ten years from the date of grant.

Restricted stock may have certain terms and conditions set by the Board of Directors. The Company will hold the shares of restricted stock until the restrictions on such shares have elapsed.

The Board of Directors sets the terms, conditions, and restrictions related to the grant of restricted stock units, including the number of restricted stock units to grant. The Board of Directors also sets vesting criteria and depending on the extent the criteria are met, the Board of Directors will determine the number of restricted stock units to be paid out.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
December 31, 2009

The Company has no outstanding stock appreciation rights, restricted stock or restricted stock units as of December 31, 2009.

1999 Stock Option Plan

The Company's 1999 Stock Option Plan (the 1999 Plan) expired in 2009. Options granted or shares issued under the 1999 Plan that were outstanding on the date the 2009 Plan became effective will remain subject to the terms of the 1999 Plan.

As of December 31, 2009, the 2009 Plan had a total of 3,136,944 shares of common stock authorized for issuance.

Activity under the 2009 Plan and the 1999 Plan is as follows (in thousands, except per share amounts):

	Shares Available for Grant	Outstanding Options	
		Number of Shares	Weighted-Average Exercise Price per Share
Balance as of January 1, 2007	251	1,727	$ 1.82
Additional shares authorized	571	—	
Options granted	(584)	584	5.36
Options exercised	—	(73)	1.72
Options canceled	104	(104)	2.31
Balance as of December 29, 2007	342	2,134	2.77
Additional shares authorized	571	—	
Options granted	(796)	796	10.51
Options exercised	—	(90)	1.93
Options canceled	552	(552)	2.60
Balance as of December 27, 2008	669	2,288	5.54
Additional shares authorized	1,000	—	
Options granted(1)	(1,936)	1,936	2.53
Options exercised	—	(34)	1.34
Options canceled(1)	1,524	(1,524)	7.36
Balance as of December 31, 2009	1,257	2,666	2.37

(1) The number of options granted and canceled includes options granted and canceled in connection with the Exchange (see below).

Options exercised as reflected in the table above exclude options that were exercised prior to vesting. These exercised but unvested shares generally vest over a four-year period. There were 3,423 and 685 unvested shares as of December 27, 2008 and December 31, 2009, respectively, which are subject to a repurchase option held by the Company at the original exercise price and are not deemed to be issued until those shares vest.

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December 31, 2009

The Company determines stock-based compensation expense using the Black-Scholes option-pricing model and the following weighted-average assumptions (excluding options granted in connection with the Exchange discussed below):

	2007	2008	2009
Expected volatility	63.0%	53.8%	59.1%
Expected life	6.0 years	6.0 years	5.7 years
Risk-free interest rate	4.4%	3.2%	2.4%
Dividend yield	0%	0%	0%
Weighted-average fair value of options granted	$ 3.22	$ 5.68	$ 1.34

Expected volatility is derived from the historical volatilities of several unrelated public companies within the life sciences industry. Each company's historical volatility is weighted based on certain qualitative factors and combined to produce a single volatility factor used by the Company. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant for zero coupon U.S. Treasury notes with maturities approximately equal to the option's expected life. Given the limited history to accurately estimate expected lives of options granted to the various employee groups, the Company used the "simplified" method. The "simplified" method is calculated as the average of the time-to-vesting and the contractual life of the options. For the expected lives of options not at-the-money, as used in determining the incremental value of modified options (see discussion of Exchange below), the lattice model was used. Forfeitures were estimated based on an analysis of actual forfeitures, and the Company periodically evaluates the adequacy of its forfeiture rate based on actual forfeiture experience, analysis of employee turnover, and other factors. The impact of a forfeiture rate adjustment is recognized in full in the period of adjustment, and if the actual number of future forfeitures differs from that estimated by the Company, the Company may be required to record adjustments to stock-based compensation expense in future periods. Adjustments to forfeiture rates have not had a significant impact on any of the periods presented herein. Each of these inputs is subjective and generally requires significant judgment by the Company.

The Company grants stock options at exercise prices not less than the estimated fair value of the Company's common stock at the date of grant. In the absence of an active market for its common stock, the Company's Board of Directors obtained contemporaneous valuations from an unrelated third-party valuation firm to determine the estimated fair value of common stock based on an analysis of relevant metrics such as the price of the most recent convertible preferred stock sales to outside investors, the rights, preferences, and privileges of the convertible preferred stock, the Company's operating and financial performance, the hiring of key personnel, the introduction of new products, the lack of marketability and additional factors relating to the Company's business.

Information regarding the Company's stock option grants during fiscal 2009 including, grant date; the number of stock options issued with each grant; and the exercise price, is summarized as follows (in thousands, except per share amounts):

Grant Date	Number of Options Granted	Exercise Price and Fair Value per Share of Common Stock
December 29, 2008	30	$ 3.81
November 17, 2009	521	$ 2.36
December 23, 2009(2)	1,385	$ 2.57

(2) Represents options granted in connection with the Exchange discussed below.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
December 31, 2009

Additional information regarding the Company's stock options outstanding and exercisable as of December 31, 2009 is summarized in the following table:

	Options Outstanding		
Exercise Price Per Share	Number of Shares (In Thousands)	Weighted-Average Remaining Contractual Life (In Years)	Options Exercisable (In Thousands)
$0.53	21	0.4	21
$1.05	200	3.1	200
$1.40	43	4.2	43
$1.96	449	5.2	449
$2.36	515	9.9	147
$2.57	1,385	7.8	1,258
$2.91 - $12.71	53	7.7	46
	2,666	7.3	2,164

Options exercisable as of December 31, 2009 had a weighted-average remaining contractual life of 6.8 years, a weighted-average exercise price per share of $2.33, and an aggregate intrinsic value of $701,000.

Options outstanding that have vested or are expected to vest as of December 31, 2009 are summarized as follows:

	Number of Shares (In Thousands)	Weighted-Average Exercise Price per Share	Weighted-Average Remaining Contractual Life (In Years)	Aggregate Intrinsic Value(3) (In Thousands)
Vested	1,620	$ 2.21	6.4	$ 701
Expected to vest	958	$ 2.62	8.6	70
Total vested and expected to vest	2,578	$ 2.36	7.3	$ 771

(3) The aggregate intrinsic value was calculated as the difference between the exercise price of the options and the fair value of the Company's common stock of $2.57 per share as of December 31, 2009.

The total intrinsic value of options exercised during 2007, 2008 and 2009 was $259,000, $857,000 and $42,000, respectively.

In December 2009, the Company completed an offer to exchange (the Exchange) 1,385,000 employee stock options that were issued under the Company's 1999 Plan. Options with exercise prices ranging from $2.91 to $12.71 per share were exchanged on a one-for-one basis for new options with a lower exercise price of $2.57 per share, the estimated fair value of common stock on the date of the Exchange as determined by the Company's Board of Directors. Options granted pursuant to the Exchange have a new vesting period that was determined by adding 3 months to the original vesting date of each exchanged option. The Exchange resulted in a modification cost totaling $645,000 of which $353,000 was recognized for the year ended December 31, 2009 with $292,000 is being amortized over the new remaining vesting periods. These vesting periods range from three months to four years from the date of the Exchange.

There were no stock-based compensation tax benefits recognized during 2007, 2008 or 2009. Capitalized stock-based compensation costs were insignificant during 2007, 2008 and 2009.

As of December 31, 2009, there was $2,692,000 of total unrecognized compensation cost related to stock-based compensation arrangements which is expected to be recognized over an average period of 2.2 years.

In February and April 2008, the Company granted 162,850 performance-based awards (the 2008 performance awards) to certain executives. These awards vest over an approximately four-year period based on continuing service and were subject to accelerated vesting if specified corporate and departmental performance goals were met for the fiscal year ended December 27, 2008. Based upon achievement of departmental performance goals, the vesting of a total of 59,000 such shares was accelerated. In March 2009, the Compensation Committee of the Board of Directors accelerated the vesting of approximately 98,000 options based upon the achievement of corporate performance goals. Stock-based compensation expense for these performance-based awards is recognized as expense over the requisite performance periods using an accelerated attribution method. The Company recognized $505,000 and $309,000 of stock-based compensation expense during 2008 and 2009, respectively, relating to performance-based awards.

In April 2009, the Company granted 154,000 performance-based awards (the 2009 performance awards) to certain executives with performance conditions substantially similar to the 2008 performance awards. Based on achievement of departmental goals, a total of 44,000 shares were accelerated in December 2009. Based on achievement of corporate goals, the vesting of a total of 47,000 shares was accelerated in December 2009. The Company recognized $181,000 of stock-based compensation expense during 2009 relating to these 2009 performance awards.

Stock Options Granted to Nonemployees

The Company accounts for options granted to nonemployees under the fair value method. The fair value of these options was estimated using the Black-Scholes option-pricing model with the following assumptions for 2007, 2008 and 2009: risk-free interest rates of 2.0% to 5.0%, dividend yield of 0%, expected volatility of 54.7% to 66.3%, and an expected life of the options equal to the remaining contractual terms of one to ten years. Options granted to nonemployees are remeasured at each financial statement reporting date until the award is vested.

The Company granted options to nonemployees to purchase 67,429 and 5,714 shares of common stock during 2007 and 2008, respectively. No options to nonemployees were granted during 2009. As of December 27, 2008 and December 31, 2009, there were 17,578 and 14,792 unvested options held by nonemployees with a weighted-average exercise price of $7.98 and $3.56, respectively, and an average remaining vesting period of 2.6 and 1.8 years, respectively.

11. Income Taxes

The Company’s net loss before (provision) benefit for income taxes is as follows (in thousands):

	2007	2008	2009
Domestic	$(23,267)	$(29,520)	$(21,735)
International	(2,079)	(126)	2,557
Net loss before (provision) benefit for income taxes	$(25,346)	$(29,646)	$(19,178)

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
December 31, 2009

Significant components of the Company's income tax (provision) benefit are as follows (in thousands):

	2007	2008	2009
Current:			
Federal	$ —	$ 55	$ 68
State	—	—	(5)
Foreign	(105)	92	(13)
Total (provision) benefit for income taxes	$(105)	$147	$ 50

Reconciliation of income taxes at the statutory rate to the (provision) benefit for income taxes recorded in the statements of operations is as follows:

	2007	2008	2009
Tax benefit at federal statutory rate	34.0%	34.0%	34.0%
State income taxes (net of federal benefit)	0.0	0.0	0.0
Foreign	(3.0)	0.2	4.4
Change in valuation allowance	(31.4)	(34.0)	(38.5)
Other	0.0	0.3	0.4
Effective tax rate	(0.4)%	0.5%	0.3%

Significant components of the Company's deferred tax assets and liabilities are as follows at (in thousands):

	December 27, 2008	December 31, 2009
Deferred tax assets:		
Net operating loss carryforwards	$ 58,850	$ 64,676
Reserves and accruals	529	601
Depreciation and amortization	430	526
Tax credit carryforwards	4,795	5,343
Stock based compensation	632	969
Total deferred tax assets	65,236	72,115
Valuation allowance	(65,236)	(72,115)
Net deferred tax assets	$ —	$ —

The Company evaluates a number of factors to determine the realizability of its deferred tax assets. Recognition of deferred tax assets is appropriate when realization of these assets is more likely than not. Assessing the realizability of deferred tax assets is dependent upon several factors including the historic financial results. The Company has incurred losses since its inception; accordingly, the net deferred tax assets have been fully offset by a valuation allowance. The valuation allowance increased by $9,570,000, $12,489,000 and $6,879,000 during 2007, 2008 and 2009, respectively.

As of December 31, 2009, the Company had net operating loss carryforwards for federal income tax purposes of $169,568,000, which expire in the years 2019 through 2029, and federal research and development tax credits of $3,648,000, which expire in the years 2019 through 2029. As of December 31, 2009, the Company had net operating loss carryforwards for California state income tax purposes of $133,019,000, which expire in

the years 2014 through 2029, state research and development tax credits of $3,901,000, which do not expire, and California manufacturer's investment credit of $127,000, which expires beginning in 2012. In addition, the Company has approximately $26,000,000 in other state net operating loss carryovers which have various expiration dates from 2010 through 2029. As of December 31, 2009, the Company had foreign net operating loss carryforwards of $2,711,000. A significant portion of the foreign net operating losses relate to activity in Japan and have a seven year carryforward with various expiration dates.

Utilization of the net operating loss carryforwards and credits may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization. If an ownership change has occurred, the utilization of net operation loss and credit carryforwards could be significantly reduced.

The Company has not provided for U.S. federal and state income taxes on all of the non-U.S. subsidiaries' undistributed earnings as of December 31, 2009, because such earnings are intended to be indefinitely reinvested. Upon distribution of those earnings in the form of dividends or otherwise, the Company would be subject to applicable U.S. federal and state income taxes. Undistributed earnings of the Company's foreign subsidiaries amounted to approximately $500,000 at December 31, 2009.

Uncertain Tax Positions

Effective January 1, 2007, the Company adopted new accounting guidance related to the recognition, measurement and presentation of uncertain tax positions. As a result, in 2007 the Company recorded a liability for net unrecognized tax benefits of $75,000, and recognized a cumulative effect of a change in accounting principle that resulted in a charge to the accumulated deficit. The liability for unrecognized tax benefits is classified as non-current.

The aggregate changes in the balance of the Company's gross unrecognized tax benefits during 2007, 2008 and 2009 were as follows (in thousands):

January 1, 2007	$1,157
Increases in balances related to tax position taken during current periods	765
December, 29, 2007	1,922
Increases in balances related to tax position taken during current periods	1,465
Decreases in balances related to tax position taken during prior periods	(130)
December 27, 2008	3,257
Increases in balances related to tax position taken during current periods	1,512
Decreases in balances related to tax position taken during prior periods	(18)
December 31, 2009	$4,751

Accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense and were immaterial.

As of December 31, 2009, unrecognized tax benefits of $67,000, if recognized, would affect the Company's effective tax rate. The remaining unrecognized tax benefits are netted against deferred tax assets with a full valuation allowance, and if recognized, would not affect the Company's effective tax rate. The Company does

not anticipate existing unrecognized tax benefits will significantly increase or decrease within the next 12 months. The Company files income tax returns in the United States, various states, and certain foreign jurisdictions. As a result of our net operating loss carryforwards, all of our tax years are subject to federal and state tax examination.

12. Employee Benefit Plans

The Company sponsors a 401(k) plan that stipulates that eligible employees can elect to contribute to the plan, subject to certain limitations, up to the lesser of 60% of eligible compensation or the maximum amount allowed by the IRS. The Company has not made contributions to this plan since its inception.

13. Related-Party Transactions

As discussed in Note 7, the Company entered into multiple convertible note purchase agreements with BMSIF pursuant to which the Company issued convertible notes and received total proceeds of $23.0 million. Principal and interest on these notes was converted into shares of Series D and Series E convertible preferred stock.

BMSIF and its related companies held 2,694,731 shares of the Company's convertible preferred stock as of December 31, 2009, which constitutes 11% of the outstanding shares on a fully diluted basis. In addition, the Company's manufacturing operations in Singapore, which commenced in October 2005, have been supported by grants from EDB, which provide incentive payments for research, development, and manufacturing activity in Singapore by the Company. These agreements are discussed in Note 3.

As discussed in Note 7, the Company entered into a convertible Note and Warrant Purchase Agreement (Note) with its existing investors to provide the Company with cash proceeds of $10,667,000. In connection with the Note, the Company issued warrants to purchase 380,958 shares of Series E convertible preferred stock at $14.00 per share (see Note 8). In November 2009, the Note's outstanding principal and accrued interest was converted into 788,059 shares of Series E convertible preferred stock.

In January 2004, the Company loaned $250,000 to an officer of the Company in connection with the purchase of a new home. The outstanding principal and interest payable under the loan of $287,000 was settled in full on April 10, 2008 in exchange for 25,975 shares of the Company's common stock that were owned by the officer. The shares were valued at $11.16 per share as determined by the Company's Board of Directors in April 2008.

Dr. Stephen Quake, who is a professor of bioengineering at Stanford University, is one of the Company's founding stockholders and held 664,821 shares of the Company's common stock as of December 27, 2008 and December 31, 2009. Dr. Quake serves as a consultant to the Company and is a member of the Company's Scientific Advisory Board. The Company paid consulting fees of $67,000, $117,000 and $108,000 to Dr. Quake during 2007, 2008 and 2009, respectively, and accrued amounts payable to Dr. Quake related to these payments were $17,000 and $8,000 as of December 27, 2008 and December 31, 2009, respectively.

The Company's general counsel was a member of a law firm whose services are utilized by the Company. On April 1, 2008, the Company's general counsel resigned his position from such law firm. Amounts paid to the law firm for services and patent fees were $576,000, and $180,000 for 2007 and the period from January 1 through April 1, 2008, respectively.

The following table represents the related party balances and transactions included in the Company's consolidated balance sheets and consolidated statements of operations (in thousands):

	December 27, 2008	December 31, 2009
Balance Sheet		
Accounts receivable	$ 328	$ 666
Deferred revenue, current portion	241	112
Deferred revenue, net of current portion	137	32

	2007	2008	2009
Statement of Operations			
Grant revenue	$1,758	$ 1,654	$ 1,522
Research and development	100	100	100
Selling, general and administrative	660	729	—
Interest expense	1,286	417	367

14. Information About Geographic Areas

The Company determined that it has a single reporting segment and operating unit structure, which is the development, manufacturing, and commercialization of microfluidic systems for the life science and Ag-Bio industries.

The following table represents the Company's product revenue by geography based on the billing address of the Company's customers for each year presented (in thousands):

	2007	2008	2009
United States	$2,426	$ 6,912	$12,630
Europe	735	3,172	4,885
Japan	732	1,645	3,172
Asia Pacific	558	1,431	2,162
Other	—	204	750
Total	$4,451	$13,364	$23,599

The Company's grant revenue is primarily generated in Singapore and collaboration revenue is primarily generated in the United States.

The following table represents long-lived assets by geographic area (in thousands):

	December 27, 2008	December 31, 2009
United States	$ 1,223	$ 922
Singapore	1,548	1,005
Japan	6	3
Total	$ 2,777	$ 1,930

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
December 31, 2009

15. Subsequent Events

Collaboration Agreement

Under a collaboration agreement to develop a new product, the Company received an up-front payment of $750,000 in May 2010. The up-front payment is being recognized on a straight-line basis over a period of fifteen months. The agreement provides for milestone payments for the design and development of product prototypes. These product prototypes were not previously produced by the Company and the achievement of these and future milestones was uncertain at the time the Company entered into the agreement. Accordingly, milestone revenues have been and are expected to be recognized as the Company achieves each milestone. The Company achieved two milestones and received two milestone payments totaling $750,000 in September 2010.

Amendment of Long-Term Debt Agreement

In June 2010, the Company amended the 2009 Agreement (see Note 5) (the 2010 Amendment). The 2010 Amendment extended the maturity date of the existing agreement to February 2013. The loan continues to bear interest at 13.5% per annum with interest only payments due monthly through February 2011. Commencing in March 2011, the Company will begin making monthly payments of $612,000 for principal and interest with an additional payment of $2,263,000 due in March 2012. The additional payment is being accreted as interest expense using the effective interest method through the extended maturity date of February 2013. The 2010 Amendment requires a prepayment fee of 1.0% of the outstanding principal amount being prepaid. In connection with the 2010 Amendment, the Company issued a new warrant to purchase 99,966 shares of Series E-1 convertible preferred stock at $7.00 per share. The fair value of this warrant resulted in additional debt discount of $63,000, which is being amortized as interest expense over the expected life of the borrowing. In addition, the Company reduced the exercise price of all of the warrants previously issued to the lender to $7.00 per share and extended the term of one of the warrants.

After considering the effects of the 2010 Amendment, the scheduled principal payments under the Company's long-term debt obligations as of December 31, 2009 are as follows (in thousands):

Years ending December 31:	
2010	$ —
2011	4,645
2012	8,823
2013	1,218
Total principal payments due in future periods	14,686
Less debt discount	(225)
	$14,461

The balance sheet classification of long-term debt at December 31, 2009 reflects the payments due under the 2010 Amendment.

Warrant Conversion

In July 2010, the Company offered holders of convertible preferred stock warrants with exercise prices greater than $7.00 per share an opportunity to amend their eligible warrants by lowering the exercise price of the warrants to $7.00 per share. The amended warrants would be exercisable for shares of new Series E-1 convertible

preferred stock and would receive an equal number of shares of the Company's common stock for each warrant exercised, subject to the warrant holder's agreement to immediately exercise the warrants in full and for cash. The offer expired on August 16, 2010. Warrants to purchase 99,864 shares of Series E-1 convertible preferred stock at $14.00 were amended. The Company received proceeds of $699,000 and issued 99,864 shares of Series E-1 convertible preferred stock and 99,864 shares of common stock.

Operating Lease

In September 2010, the Company terminated its existing lease agreement and entered into a new lease for its headquarters in South San Francisco, California. The new lease expires in April 2015 and includes a renewal option for an additional three years. The Company received a $360,000 lease incentive payment which will be recognized as a reduction of rent expense on a straight-line basis over the term of the new lease.

After considering the effects of the new office lease, the future minimum lease payments under noncancelable operating leases as of December 31, 2009 are as follows (in thousands):

Years ending December 31:	
2010	$1,509
2011	999
2012	898
2013	835
2014	835
2015	281
Total minimum payments	$5,357

Singapore EDB Grant

As described in Note 3, in October 2005, the Company entered into a letter agreement with EDB providing for up to SG$10.0 million (approximately US$7.1 million using the December 31, 2009 exchange rate) in grants from EDB. In July 2010, Fluidigm Singapore submitted its final progress report and evidence of achievement of its development targets under the letter agreement. In September 2010, the Company received confirmation from EDB that all of its obligations under the letter agreement had been met, and in October 2010, received its final grant payment.

FLUIDIGM CORPORATION

CONDENSED CONSOLIDATED BALANCE SHEETS

(In thousands, except per share amounts)

	December 31, 2009 (Note 1)	September 30, 2010 (Unaudited)	Pro forma as of September 30, 2010 (Unaudited)
ASSETS			
Current assets:			
Cash and cash equivalents	$ 14,602	$ 5,083	
Accounts receivable (net of allowances of $103 and $467 at December 31, 2009 and September 30, 2010, respectively)	8,690	6,886	
Inventories	3,945	5,568	
Prepaid expenses and other current assets	1,246	723	
Total current assets	28,483	18,260	
Restricted cash	256	125	
Property and equipment, net	1,930	2,169	
Investment	1,340	1,340	
Other assets	144	196	
Total assets	$ 32,153	$ 22,090	
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT			
Current liabilities:			
Accounts payable	$ 2,224	$ 1,805	
Accrued compensation and related benefits	1,343	2,064	
Other accrued liabilities	2,188	2,667	
Deferred revenue, current portion	758	1,490	
Long-term debt, current portion	—	3,020	
Convertible preferred stock warrants	616	397	$ —
Total current liabilities	7,129	11,443	
Deferred revenue, net of current portion	258	454	
Long-term debt, net of current portion	14,461	11,590	
Other liabilities	79	449	
Total liabilities	21,927	23,936	
Commitments and contingencies			
Convertible preferred stock issuable in series: $0.0035 par value, 20,001 shares authorized, 17,713 and 17,813 shares issued and outstanding as of December 31, 2009 and September 30, 2010, respectively; aggregate liquidation preference of $188,948 as of September 30, 2010, no shares authorized, issued or outstanding pro forma (unaudited)	183,845	184,549	—
Stockholders' deficit:			
Common stock: $0.0035 par value, 29,253 shares authorized, 3,219 and 3,346 shares issued and outstanding as of December 31, 2009 and September 30, 2010, respectively; 21,159 shares issued and outstanding pro forma (unaudited)	11	12	74
Additional paid-in capital	9,298	10,594	195,478
Accumulated other comprehensive loss	(503)	(752)	(752)
Accumulated deficit	(182,425)	(196,249)	(196,249)
Total stockholders' deficit	(173,619)	(186,395)	$ (1,449)
Total liabilities, convertible preferred stock and stockholders' deficit	$ 32,153	$ 22,090	

See accompanying notes.

FLUIDIGM CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts)

	Nine Months Ended September 30,	
	2009	2010
	(Unaudited)	
Revenue:		
Product revenue	$ 16,369	$ 20,883
Collaboration revenue	—	975
Grant revenue	1,420	1,347
Total revenue	17,789	23,205
Costs and expenses:		
Cost of product revenue	8,404	7,999
Research and development	9,249	10,097
Selling, general and administrative	14,386	17,672
Total costs and expenses	32,039	35,768
Loss from operations	(14,250)	(12,563)
Interest expense	(1,849)	(1,620)
Gain from changes in the fair value of convertible preferred stock warrants, net	180	210
Interest income	33	7
Other income (expense), net	189	284
Loss before income taxes	(15,697)	(13,682)
Provision for income taxes	(3)	(142)
Net loss	$ (15,700)	$ (13,824)
Net loss per share of common stock, basic and diluted	$ (5.34)	$ (4.26)
Shares used in computing net loss per share of common stock, basic and diluted	2,939	3,246
Pro forma net loss per share of common stock, basic and diluted (unaudited)		$ (0.67)
Shares used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)		20,975

See accompanying notes.

FLUIDIGM CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Nine Months Ended September 30,	
	2009	2010
	(Unaudited)	
Operating activities		
Net loss	$(15,700)	$(13,824)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,283	890
Stock-based compensation expense	1,233	1,266
Gain from changes in the fair value of convertible preferred stock warrants, net	(180)	(148)
Gain on sales of property and equipment	(29)	—
Amortization of debt discount and issuance cost	226	274
Changes in assets and liabilities:		
Accounts receivable	(3,057)	1,511
Inventories	2,207	(1,642)
Prepaid expenses and other assets	218	472
Accounts payable	(701)	(419)
Deferred revenue	(726)	927
Other liabilities	838	1,446
Net cash used in operating activities	(14,388)	(9,247)
Investing activities		
Proceeds from disposal of property and equipment	36	—
Purchases of property and equipment	(646)	(1,130)
Restricted cash	—	131
Net cash used in investing activities	(610)	(999)
Financing activities		
Proceeds from issuance of convertible promissory notes, net of issuance costs	10,510	—
Proceeds from exercise of stock options	53	31
Proceeds from exercise of convertible preferred stock warrants and issuance of convertible preferred stock, net of issuance costs	—	633
Repayment of long-term debt	(1,034)	—
Net cash provided by financing activities	9,529	664
Effect of exchange rate changes on cash and cash equivalents	48	63
Net decrease in cash and cash equivalents	(5,421)	(9,519)
Cash and cash equivalents at beginning of period	17,796	14,602
Cash and cash equivalents at end of period	$ 12,375	$ 5,083
Supplemental disclosures of cash flow information		
Cash paid for interest	$ 1,364	$ 1,327
Issuance of convertible preferred stock warrants in connection with amendment of long-term debt agreement	$ 76	$ 63
Issuance of convertible preferred stock warrants in connection with issuance of convertible promissory notes	$ 262	$ —
Extinguishment of convertible preferred stock warrants as part of preferred stock warrant exchange and exercise	$ —	$ 72

See accompanying notes.

FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
September 30, 2010
(Unaudited)

1. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles for interim financial information. These financial statements were prepared following the requirements of the Securities and Exchange Commission (SEC) for interim reporting. As permitted under those rules, certain footnotes or other financial information that are normally required by U.S. generally accepted accounting principles (GAAP) can be condensed or omitted. These financial statements have been prepared on the same basis as the Company's annual financial statements and, in the opinion of management, reflect all adjustments (consisting only of normal recurring adjustments) that are necessary for a fair presentation of the Company's financial position as of September 30, 2010 and its results of operations and cash flows for the nine months ended September 30, 2009 and 2010. The results of operations for the nine months ended September 30, 2010 are not necessarily indicative of the results to be expected for the year ending December 31, 2010 or for any other interim period or for any other future year.

The preparation of these condensed consolidated financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses, and related disclosures. On an ongoing basis, the Company evaluates its estimates, including critical accounting policies or estimates related to revenue recognition, income tax provision, stock-based compensation, inventory valuation, and warrants to purchase convertible preferred stock. The Company bases its estimates on historical experience and on various relevant assumptions that the Company believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from these estimates.

The condensed consolidated balance sheet data as of December 31, 2009 was derived from the audited consolidated financial statements included elsewhere in this prospectus. These interim financial statements should be read in conjunction with the audited consolidated financial statements and the related notes thereto for the year ended December 31, 2009.

Going Concern

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern. The Company has incurred recurring losses and operating cash flow deficiencies. As of September 30, 2010, the Company had a total stockholders' deficit of $196.2 million. The Company has historically experienced negative cash flows from operating activities as it has expanded its business and built its infrastructure and this may continue in the future. If the Company's cash resources are insufficient to satisfy its future cash requirements, the Company may be required to issue convertible debt or equity to raise additional capital. If the Company raises additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to its technologies or its products, or grant licenses on terms that are not favorable to the Company.

The Company is exploring its financing alternatives. If the Company is unable to raise adequate funds, it may have to liquidate some or all of its assets, or delay, reduce the scope of or eliminate some or all of its development programs. If the Company does not have, or is not able to obtain, sufficient funds, it may have to delay development or commercialization of its products or license to third parties the rights to commercialize products or technologies that it would otherwise seek to commercialize. In addition, the Company may have to

reduce marketing, customer support or other resources devoted to its products or cease operations. Any of these factors could harm the Company's operating results.

The Company may be unable to raise additional capital or to do so on terms that are favorable, depending upon capital market and overall economic conditions. Sale of convertible debt securities or additional equity could result in substantial dilution to the Company's stockholders.

These factors raise substantial doubt about the Company's ability to continue as a going concern. The accompanying financial statements do not include any adjustments that might result from the outcome of these uncertainties.

Subsequent Events

The Company has evaluated subsequent events after the balance sheet date of September 30, 2010 through December 3, 2010, the date of the filing of the condensed consolidated financial statements.

Pro Forma Presentation

The Company's board of directors has approved the filing of a registration statement on Form S-1 with respect to a proposed initial public offering of its common stock. The unaudited pro forma information as of September 30, 2010 contemplates the completion of this offering and the conversion of all outstanding shares of convertible preferred stock into shares of common stock and the reclassification of preferred stock warrant liabilities to additional paid-in capital at September 30, 2010. The pro forma information excludes any common stock that may be issued upon a public offering by the Company and any related net proceeds therefrom.

Comprehensive Loss

The Company's comprehensive loss consists primarily of net loss and foreign currency translation adjustments. For the nine months ended September 30, 2009 and 2010, comprehensive loss was $576,000 and $752,000, respectively.

Net Loss and Pro Forma Net Loss per Share of Common Stock

The Company's basic net loss per share of common stock is calculated by dividing net loss by the weighted-average number of shares of common stock outstanding for the period. The weighted-average number of shares of common stock used to calculate the Company's basic net loss per share of common stock excludes shares subject to repurchases related to stock options that were exercised prior to vesting, as such shares are not deemed to be issued until the related stock options vest. Diluted net loss per share of common stock is computed by dividing net loss by the weighted-average number of potential common shares outstanding for the period as determined using the treasury-stock method. For purposes of this calculation, convertible preferred stock, options to purchase common stock, common stock subject to repurchase, warrants to purchase convertible preferred stock, and shares of convertible preferred stock subject to conversion of the Company's convertible promissory notes are considered to be potential common shares but have been excluded from the calculation of diluted net loss per share of common stock, as their effect is anti-dilutive.

FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
September 30, 2010
(Unaudited)

The following potential common shares were excluded from the computation of diluted net loss per share of common stock for the interim periods presented because including them would have been anti-dilutive (in thousands).

	September 30,	
	2009	2010
Convertible preferred stock	16,389	17,813
Options to purchase common stock	2,189	3,195
Warrants to purchase convertible preferred stock	669	669
Convertible promissory notes convertible into shares of convertible preferred stock	788	—

Pro forma basic and diluted net loss per share of common stock have been computed to give effect to the conversion of convertible preferred stock into common stock. Also, the numerator in the pro forma basic and diluted net loss per share calculation has been adjusted to remove gains and losses resulting from changes in the fair value of convertible preferred stock warrants as these will become warrants to purchase shares of the Company's common stock upon a qualifying initial public offering. The following table reconciles the calculation of pro forma net loss per share (in thousands, except per share amounts):

	Nine months ended September 30, 2010
Pro Forma:	
Numerator:	
Net loss	$ (13,824)
Change in fair value of convertible preferred stock warrants	(148)
Net loss used in computing pro forma net loss per share of common stock, basic and diluted	$ (13,972)
Denominator:	
Shares used in computing net loss per share of common stock, basic and diluted	3,246
Pro forma adjustments to reflect assumed conversion of convertible preferred stock	17,729
Shares used in computing pro forma net loss per share of common stock, basic and diluted	20,975
Pro forma net loss per share of common stock, basic and diluted	$ (0.67)

Investment

The Company has a minority equity investment that is accounted for under the cost method of accounting. Under the cost method of accounting, investments in equity securities are carried at cost and are adjusted only for other-than-temporary declines in value. No such declines have been identified through September 30, 2010.

FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
September 30, 2010
(Unaudited)

2. Collaboration and Grant Agreements

Collaboration Agreement

Under a collaboration agreement to develop a new product, the Company received an up-front payment of $750,000 in May 2010. The up-front payment is being recognized on a straight-line basis over a period of fifteen months. The agreement provides for milestone payments for the design and development of product prototypes. These product prototypes were not previously produced by the Company and the achievement of these and future milestones was uncertain at the time the Company entered into the agreement. Accordingly, milestone revenues have been and are expected to be recognized as the Company achieves each milestone. The Company achieved two milestones and received payments totaling $750,000 in September 2010.

Grant Agreement

In October 2005, the Company entered into a letter agreement with the Singapore Economic Development Board (EDB) providing for up to SG$10.0 million (approximately US$7.6 million using the September 30, 2010 exchange rate) in grants from EDB. In July 2010, Fluidigm Singapore submitted its final progress report and evidence of achievement of its development targets under the letter agreement. In September 2010, the Company received confirmation from EDB that all of its obligations under the letter agreement had been met and in October 2010, received its final grant payment.

3. Inventories

Inventories consist of the following (in thousands):

	December 31, 2009	September 30, 2010
Raw materials	$ 1,944	$ 2,018
Work-in-process	121	1,502
Finished goods	1,880	2,048
	$ 3,945	$ 5,568

4. Fair Value of Financial Instruments

The carrying values of the Company's financial instruments, including accounts receivable, restricted cash, and accounts payable, approximated their fair values due to the short period of time to maturity or repayment. As a basis for considering fair value, the Company follows a three-tier value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level I: observable inputs such as quoted prices in active markets;

Level II: inputs other than quoted prices in active markets that are observable either directly or indirectly; and

Level III: unobservable inputs in which there is little or no market data, which requires the Company to develop its own assumptions.

This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. The Company's cash equivalents are classified as Level I because they are valued using quoted market prices. The Company's convertible preferred stock warrants are valued using Level III inputs, the valuation of which is discussed in Note 7.

FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
September 30, 2010
(Unaudited)

Changes in the value of convertible preferred stock warrants were as follows (in thousands):

	Nine months ended September 30,	
	2009	2010
Balance, beginning of period	$ 141	$ 616
Issuances	339	63
Exercises	—	(72)
Changes in fair value	(180)	(210)
Balance, end of period	$ 300	$ 397

Following are summaries of the Company's cash equivalents (in thousands):

	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value
As of September 30, 2010:				
Money market funds	$ 432	$ —	$ —	$ 432
As of December 31, 2009:				
Money market funds	$ 9,926	$ —	$ —	$ 9,926
Notes from government-sponsored agencies	2,286	—	—	$ 2,286
	$ 12,212	$ —	$ —	$ 12,212

5. Long-Term Debt

In June 2010, the Company amended the 2009 Agreement (the 2010 Amendment). The 2010 Amendment extended the maturity date of the existing agreement to February 2013. This loan continues to bear interest at 13.5% per annum with interest only payments due monthly through February 2011. Commencing in March 2011, the Company will begin making monthly payments of $612,000 for principal and interest with an additional payment of $2,263,000 due in March 2012. The additional payment is being accreted as interest expense using the effective interest method through the extended maturity date of February 2013. The 2010 Amendment requires a prepayment fee of 1.0% of the outstanding principal amount being prepaid. In connection with the 2010 Amendment, the Company issued a new warrant to purchase 99,966 shares of Series E-1 convertible preferred stock at $7.00 per share. The fair value of this warrant resulted in additional debt discount of $63,000 to be amortized as interest expense over the expected life of the borrowing. In addition, the Company reduced the exercise price of all the warrants previously issued to the lender to $7.00 per share and extended the term of one of the warrants.

As of September 30, 2010, the Company was in compliance with all loan covenants or had obtained waivers through December 31, 2010 from the lender.

6. Commitments and Contingencies

Operating Lease

In September 2010, the Company terminated its existing lease agreement and entered into a new lease for its headquarters in South San Francisco, California. The new lease expires in April 2015 and includes a renewal

option for an additional three years. Upon entering into the new lease, the Company received a $360,000 lease incentive payment that will be recognized as a reduction of rent expense on a straight-line basis over the term of the new lease.

Future minimum lease payments under noncancelable operating leases are as follows (in thousands):

Years ending December 31:	
2011	$ 999
2012	898
2013	835
2014	835
2015	281
Total minimum payments	$3,848

7. Convertible Preferred Stock Warrants

In July 2010, the Company offered holders of preferred stock warrants with exercise prices greater than $7.00 per share an opportunity to amend their eligible warrants by lowering the exercise price of the warrants to $7.00 per share. The amended warrants would be exercisable for shares of Series E-1 stock and would receive one common share for each warrant exercised, subject to the warrant holder's agreement to immediately exercise the warrants in full and for cash. The rights, preferences, and other terms of the Series E-1 stock are identical to those of the Company's Series E stock, except the liquidation preference of the Series E-1 stock is $7.00 per share. The offer expired in August 2010. Warrants to purchase 99,864 shares of Series E-1 stock at $14.00 were amended. The Company received cash proceeds of $699,000 and issued 99,864 shares of Series E-1 stock and 99,864 shares of common stock.

As of September 30, 2010, the Company had 668,987 outstanding warrants to purchase shares of convertible preferred stock with exercise prices ranging from $7.00—$14.00 per share. The Company accounts for convertible preferred stock warrants as liabilities that are recognized at fair value at each measurement date. The fair value of the Company's convertible preferred stock warrants was computed using the Black-Scholes option valuation method and the following weighted average assumptions:

	September 30, 2009	September 30, 2010
Expected volatility	69.8%	63.9%
Expected life (equals the remaining contractual term)	7.5 years	6.8 years
Risk-free interest rate	2.7%	2.2%
Dividend yield	0%	0%

FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
September 30, 2010
(Unaudited)

8. Stock-Based Compensation

During the nine months ended September 30, 2010, the Company granted 640,000 options at a weighted-average exercise price of $2.57 per share and a weighted-average fair value of $1.00 per share. These options vest over a four-year period.

Information regarding the Company's stock option grants since September 30, 2009 including grant date; the number of stock options issued with each grant; and the exercise price, which either equaled or was greater than the grant date fair value of the underlying common stock for each grant of stock options, is summarized as follows (in thousands, except per share amounts):

Grant Date	Number of Options Granted	Exercise Price per Share
November 17, 2009	520	$ 2.36
December 23, 2009	1,385	2.57
January 28, 2010	98	2.57
May 6, 2010	259	2.57
August 6, 2010	283	2.57

The computation of the fair value of stock options and other equity instruments using the Black-Scholes option pricing model requires inputs such as the fair value of the Company's common stock. The Company performs contemporaneous valuations to determine the fair value of its common stock.

The Company recognized stock-based compensation expense of $1,233,000 and $1,266,000 during the nine months ended September 30, 2009 and 2010, respectively.

9. Income Taxes

Income tax expense for the nine months ended September 30, 2009 and September 30, 2010 was $3,000 and $142,000, respectively, and was comprised of state and foreign income and withholding taxes. The provision for income taxes for the periods differs from the 34% U.S. federal statutory rate primarily due to the recording of a valuation allowance for U.S. losses and tax assets which the Company does not consider to be realizable.

The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. At September 30, 2010, the Company had no material interest or penalties accrued related to uncertain tax positions.

As of December 31, 2009, the Company's unrecognized tax benefits balance was $4,785,000. During the nine months ended September 30, 2010, the unrecognized tax benefits balance increased by $588,000 to $5,373,000. As of September 30, 2010, unrecognized tax benefits of $81,000, if recognized, would affect the Company's effective tax rate. The remaining unrecognized tax benefits are netted against deferred tax assets with a full valuation allowance, and if recognized, would not affect the Company's effective tax rate.

10. Information About Geographic Areas

The Company has a single reporting segment and operating unit structure, which is the development, manufacturing, and commercialization of microfluidic systems for the life science and agricultural biotechnology industries.

FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
September 30, 2010
(Unaudited)

The following table presents the Company's product revenue by geography based on the billing address of the Company's customers for each period presented (in thousands).

	Nine months ended September 30,	
	2009	2010
United States	$ 8,260	$12,028
Europe	3,365	4,768
Japan	2,741	1,568
Asia Pacific	1,369	2,053
Other	634	466
Total	$16,369	$20,883

The Company's grant revenue is primarily generated in Singapore and collaboration revenue is primarily generated in the United States.

11. Related Party Transactions

The Company had related party receivables of $666,000 and $594,000 and related deferred revenue of $144,000 and $75,000 at December 31, 2009 and September 30, 2010, respectively, included in the accompanying condensed consolidated balance sheet. The accompanying condensed consolidated statements of operations also included the following related party transactions (in thousands):

	Nine months ended September 30,	
	2009	2010
Grant revenue	$1,226	$1,069
Research and development expenses	75	75
Interest expense	201	—

Grant revenue consists of amounts received from the Economic Development Board of Singapore, which is an affiliate of a shareholder of the Company.

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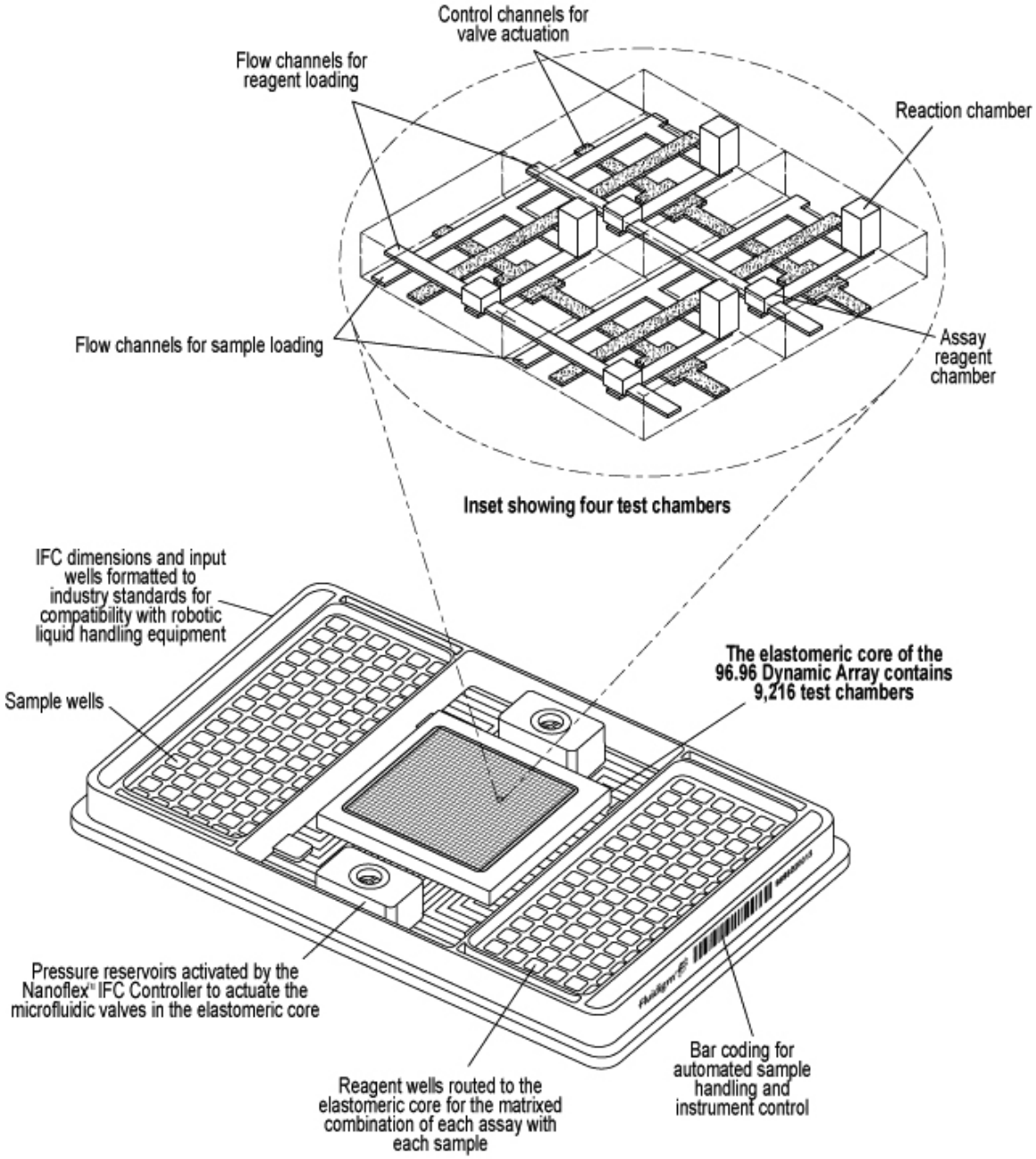

Dynamic Array Schematic

Fluidigm®

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth all expenses to be paid by the registrant, other than estimated underwriting discounts and commissions, in connection with this offering. All amounts shown are estimates except for the SEC registration fee and the Financial Industry Regulatory Authority, or FINRA, filing fee.

SEC registration fee	$6,150
FINRA filing fee	9,125
The NASDAQ Global Market listing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Blue sky fees and expenses (including legal fees)	*
Transfer agent and registrar fees	*
Miscellaneous expenses	*
Total	$ *

* To be provided by amendment

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law, or DGCL, authorizes a corporation's board of directors to grant, and authorizes a court to award, indemnity to officers, directors and other corporate agents.

As permitted by Section 102(b)(7) of the Delaware General Corporation Law, the registrant's certificate of incorporation includes provisions that eliminate the personal liability of its directors and officers for monetary damages for breach of their fiduciary duty as directors and officers.

In addition, as permitted by Section 145 of the DGCL, the bylaws of the registrant provide that:

- The registrant shall indemnify its directors and officers for serving the registrant in those capacities or for serving other business enterprises as a director, officer, employee or agent at the registrant's request, to the fullest extent permitted by the DGCL. The DGCL provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful.
- The registrant may, in its discretion, indemnify employees and agents in those circumstances where indemnification is not prohibited by the DGCL or other law.
- The registrant is required to advance expenses, as incurred, to its directors and officers in connection with defending a proceeding, except that such director or officer shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification under the registrant's bylaws or the DGCL.
- The registrant will not be obligated pursuant to the bylaws to indemnify a person with respect to proceedings initiated by that person against the registrant or its directors, officers, employees, agents or other indemnities, except with respect to proceedings authorized by the registrant's Board of Directors prior to their initiation, or brought to enforce a right to indemnifications as otherwise required by applicable law.
- The rights conferred in the bylaws are not exclusive, and the registrant is authorized to enter into indemnification agreements with its directors, officers, employees and agents and to obtain insurance to indemnify such persons.

- The registrant may not retroactively amend the bylaw provisions to reduce its indemnification obligations to directors, officers, employees and agents.

The registrant's policy is to enter into separate indemnification agreements with each of its directors and officers that provide the maximum indemnity allowed to directors and executive officers by Section 145 of the Delaware General Corporation Law and also provides for certain additional procedural protections. The registrant also maintains directors and officers insurance to insure such persons against certain liabilities.

These indemnification provisions and the indemnification agreements entered into between the registrant and its officers and directors may be sufficiently broad to permit indemnification of the registrant's officers and directors for liabilities (including reimbursement of expenses incurred) arising under the Securities Act.

The underwriting agreement filed as Exhibit 1.1 to this registration statement provides for indemnification by the underwriters of the registrant and its officers and directors for certain liabilities arising under the Securities Act and otherwise.

Item 15. Recent Sales of Unregistered Securities.

In the three years prior to the filing of this registration statement, the registrant has issued the following unregistered securities:

(a) From December 20, 2007 through June 11, 2010, the registrant issued and sold an aggregate of 155,725 shares of its common stock upon the exercise of options issued to certain employees, directors and consultants under the registrant's 1999 Stock Option Plan, as amended, at exercise prices ranging from $0.53 to $8.40, for aggregate consideration of $246,318.

(b) From December 28, 2007 through December 29, 2008, the registrant granted to certain of its employees, directors and consultants under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 920,298 shares of its common stock at exercise prices ranging from $3.81 to $12.71 per share.

(c) From August 3, 2010 through August 30, 2010, the registrant issued and sold an aggregate of 6,446 shares of its common stock upon the exercise of options issued to certain employees, directors and consultants under the registrant's 2009 Equity Incentive Plan, as amended, at exercise prices ranging from $2.36 to $2.57, for aggregate consideration of $16,388.

(d) From November 17, 2009 through August 26, 2010, the registrant granted to certain of its employees, directors and consultants under the registrant's 2009 Equity Incentive Plan, as amended, options to purchase an aggregate of 704,138 shares of its common stock at exercise prices ranging from $2.36 to $2.57 per share.

(e) From October 2007 through December 2007, the registrant issued and sold an aggregate of 2,512,840 shares of Series E preferred stock to a total of seven investors at $14.00 per share, for aggregate proceeds of $35,179,780.

(f) In December 2007, the registrant issued 1,714 shares of its common stock to one accredited investor at an issuance price of $4.76 per share for aggregate monetary consideration of $8,160, which amount was deemed paid by the transfer of certain rights granted to registrant pursuant to the terms of a licensing agreement.

(g) In December 2007, the registrant granted to one of its directors under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 28,571 shares of the registrant's common stock at an exercise price of $8.40 per share.

(h) In February 2008, in connection with an amendment to a loan and security agreement between the registrant and Lighthouse Capital Partners V, L.P., or LCP, the registrant issued a warrant to purchase 85,714 shares of the registrant's Series E preferred stock to LCP, or LCP, at an exercise price of $14.00 per share.

(i) In February 2008, the registrant granted to one of its executive officers under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 171,427 shares of the registrant's common stock at an exercise price of $8.40 per share.

(j) In April 2008, the registrant granted to 110 of its employees, consultants and directors under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 546,711 shares of its common stock at an exercise price of $11.16 per share.

(k) On May 12, 2008, the registrant issued 4,692 shares of its Series C preferred stock to Imperial Bank pursuant to Imperial Bank's net exercise of its warrant to purchase up to 11,795 shares of Series C preferred stock. The remainder of the warrant was cancelled pursuant to the terms of the net exercise.

(l) In June 2008, the registrant granted to seven of its employees and consultants under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 24,426 shares of its common stock at an exercise price of $11.97 per share.

(m) In August 2008, the registrant granted to eight of its employees under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 18,426 shares of its common stock at an exercise price of $12.71 per share.

(n) In August 2009, the registrant issued and sold convertible promissory notes with an aggregate principal amount of $10,666,814 and warrants to purchase an aggregate of 380,906 shares of the registrant's Series E preferred stock an exercise price of $14.00 per share to a total of 100 accredited investors.

(o) In November 2009, the registrant issued and sold an aggregate of 1,323,773 shares of the registrant's Series E preferred stock to a total of 101 accredited investors at a purchase price of $14.00 per share, for aggregate consideration of $18,532,822, of which (i) $11,032,826 was paid by the conversion of indebtedness of the registrant and interest accrued thereon, and (ii) $7,499,996 was paid by cash payments to the registrant.

(p) In November 2009, the registrant granted to seven of its employees and consultants under the registrant's 2009 Equity Incentive Plan, as amended, options to purchase an aggregate of 188,545 shares of its common stock at an exercise price of $2.36 per share.

(q) In December 2009, as part of a stock option exchange program, the registrant granted to 109 of its employees, directors and consultants under the registrant's 2009 Equity Incentive Plan, as amended, options to purchase an aggregate of 1,395,666 shares of the registrant's common stock at an exercise price of $2.57 per share in exchange for the cancellation by such parties of stock options to purchase an equal number of shares of the registrant's common stock that were previously outstanding under the registrant's 1999 Stock Option Plan, as amended.

(r) In January 2010, the registrant granted to five of its directors under the registrant's 2009 Equity Incentive Plan, as amended, options to purchase an aggregate of 75,000 shares of its common stock at an exercise price of $2.57 per share.

(s) In June 2010, in connection with an amendment to a loan and security agreement between the registrant and LCP, the registrant (i) amended and restated warrants previously issued to LCP and its affiliates to provide that the exercise price of the amended and restated warrants will be reduced to $7.00 per share and that the

amended and restated warrants will be exercisable for a number of shares of the registrant's Series D-1 preferred stock or Series E-1 preferred stock, as applicable, equal to the number of shares of the registrant's Series D preferred stock or Series E preferred stock that was previously issuable upon the exercise of the warrants; and (ii) issued a new warrant to purchase 257,108 shares of the registrant's Series E-1 preferred stock to LCP at an exercise price of $7.00 per share.

(t) In August 2010, upon exercise of outstanding amended and restated warrants, the registrant issued and sold an aggregate of 99,864 shares of the registrant's Series E-1 preferred stock and an aggregate of 99,864 shares of the registrant's common stock to 49 accredited investors for aggregate proceeds of $699,048.

(u) In August 2010, the registrant granted to one of its employees under the registrant's 2009 Equity Incentive Plan, as amended, options to purchase an aggregate of 200,000 shares of its common stock at an exercise price of $2.57 per share.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering, and the registrant believes that each transaction was exempt from the registration requirements of the Securities Act in reliance on the following exemptions:

- with respect to the transactions described in paragraphs (a) through (d), Rule 701 promulgated under the Securities Act as transactions pursuant to a compensatory benefit plan approved by the registrant's Board of Directors; and
- with respect to the transactions described in paragraphs (e) through (u), Section 4(2) of the Securities Act, or Rule 506 of Regulation D promulgated thereunder, as transactions by an issuer not involving a public offering. Each recipient of the securities in this transaction represented his or her intention to acquire the securities for investment only and not with a view to, or for resale in connection with, any distribution thereof, and appropriate legends were affixed to the share certificates issued in each such transaction. In each case, the recipient received adequate information about the registrant or had adequate access, through his or her relationship with the registrant, to information about the registrant.

Item 16. Exhibits and Financial Statement Schedules.

(a) *Exhibits.* The following exhibits are included herein or incorporated herein by reference:

Exhibit Number	Description
1.1*	Form of Underwriting Agreement.
3.1	Certificate of Incorporation of the registrant, as currently in effect.
3.2*	Form of Restated Certificate of Incorporation of the registrant, to be in effect upon the completion of this offering.
3.3	Bylaws of the registrant, as currently in effect.
3.4*	Form of Amended and Restated Bylaws of the registrant, to be in effect upon completion of this offering.
4.1*	Specimen Common Stock Certificate of the registrant.
4.2†	Series E Preferred Stock Purchase Agreement dated June 13, 2006 by and among the registrant and the purchasers of the registrant's preferred stock set forth therein, as amended.
4.3	Form of Warrant to Purchase Shares of Preferred Stock of the registrant dated as of August 25, 2009.
4.4	Series E Preferred Stock Purchase Agreement dated November 16, 2009 by and among the registrant and the purchasers of the registrant's preferred stock set forth therein.

Exhibit Number	Description
4.5	Ninth Amended and Restated Investor Rights Agreement between the registrant and certain holders of the registrant's capital stock named therein, including amendments No. 1 and No. 2.
4.6†	Loan and Security Agreement No. 4561 between the registrant and Lighthouse Capital Partners V, L.P. dated March 29, 2005, including amendments No. 1 through No. 8.
4.6A	Amended and Restated Preferred Stock Purchase Warrant issued to Lighthouse Capital Partners V, L.P. effective June 14, 2010.
4.6B	Amended and Restated Preferred Stock Purchase Warrant issued to Lighthouse Capital Partners V, L.P. effective June 14, 2010.
4.6C	Amended and Restated Preferred Stock Purchase Warrant issued to Lighthouse Capital Partners V, L.P. effective June 14, 2010.
4.6D	Preferred Stock Purchase Warrant issued to Lighthouse Capital Partners V, L.P. effective June 14, 2010.
4.6E	Negative Pledge Agreement by and between the registrant and Lighthouse Capital Partners V, L.P. dated March 29, 2005.
5.1*	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation.
10.1*	Form of Indemnification Agreement between the registrant and its directors and officers.
10.2	1999 Stock Option Plan of the registrant, as amended.
10.2A	Forms of agreements under the 1999 Stock Option Plan.
10.3	2009 Equity Incentive Plan of the registrant, as amended.
10.3A	Forms of agreements under the 2009 Equity Incentive Plan.
10.4*	2011 Equity Incentive Plan of the registrant.
10.4A*	Forms of agreements under the 2011 Equity Incentive Plan.
10.5†	Second Amended and Restated License Agreement by and between California Institute of Technology and the registrant effective as of May 1, 2004.
10.5A†	First Addendum, effective as of March 29, 2007, to Second Amended and Restated License Agreement by and between California Institute of Technology and the registrant effective as of May 1, 2004.
10.6†	Co-Exclusive License Agreement between President and Fellows of Harvard College and the registrant effective as of October 15, 2000.
10.6A†	First Amendment to Co-Exclusive License Agreement between President and Fellows of Harvard College and the registrant effective as of October 15, 2000.
10.7†	Co-Exclusive License Agreement between President and Fellows of Harvard College and the registrant effective as of October 15, 2000.
10.8†	Co-Exclusive License Agreement between President and Fellows of Harvard College and the registrant effective as of October 15, 2000.
10.9†	Letter Agreement between President and Fellows of Harvard College and the registrant dated December 22, 2004.
10.10†	Patent License Agreement by and between Gyros AB and the registrant dated January 9, 2003.

Exhibit Number	Description
10.10A†	Amendment No. 1 dated January 9, 2005 to Patent License Agreement by and between Gyros AB and the registrant dated January 9, 2003.
10.11†	Master Closing Agreement by and between UAB Research Foundation, Oculus Pharmaceuticals, Inc. and the registrant dated March 7, 2003.
10.11A†	License Agreement by and between UAB Research Foundation and the registrant dated March 7, 2003.
10.12†	Amended and Restated Letter Agreement Regarding Application for Incentives Under the Research Incentive Scheme for Companies (RISC) dated March 27, 2008 (originally dated October 7, 2005), by and between Singapore Economic Development Board and Fluidigm Singapore Pte. Ltd.
10.12A†	Supplement, dated January 11, 2006, to Letter Agreement Relating to Application for Incentives under the Research Incentive Scheme for Companies (RISC), dated October 7, 2005 between Singapore Economic Development Board and Fluidigm Singapore Pte. Ltd.
10.13†	Amended and Restated Letter Agreement Regarding Application for Incentives Under the Research Incentive Scheme for Companies (RISC) dated March 27, 2008 (originally dated February 12, 2007), by and between Singapore Economic Development Board and Fluidigm Singapore Pte. Ltd.
10.14	Form of Employment and Severance Agreement between the registrant and each of its executive officers.
10.15	Employee Loan Agreement by and between the registrant and Gajus V. Worthington dated January 20, 2004.
10.16	Stock Repurchase Agreement by and between the registrant and Gajus V. Worthington dated April 10, 2008.
10.17	Offer Letter to Vikram Jog dated January 29, 2008.
10.18	Offer Letter to Fredric Walder dated May 3, 2010.
10.19*	Lease Agreement between ARE - San Francisco No. 17 LLC and the registrant, dated September 14, 2010, as amended September 22, 2010.
10.20	Tenancy for Flatted Factory Space in Singapore between JTC Corporation and the registrant dated July 27, 2005, as amended August 12, 2008 and May 31, 2010.
10.21*	Collaboration and Option Agreement by and between Novartis Vaccines & Diagnostics, Inc. and the registrant dated May 17, 2010, including all exhibits thereto.
10.22*	Form of License Agreement by and between Novartis Vaccines & Diagnostics, Inc. and the registrant.
10.23*	Quality Agreement for Development of In-Vitro Diagnostic Devices by and between Novartis Vaccines & Diagnostics, Inc. and the registrant dated May 14, 2010.
21.1	List of subsidiaries of registrant.
23.1	Consent of Independent Registered Public Accounting Firm.
23.2*	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1).
24.1	Power of Attorney (see page II-8 to this registration statement on Form S-1).

* To be filed by amendment.

† Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.

(b) *Financial Statement Schedules.*

All schedules have been omitted because the information required to be presented in them is not applicable or is shown in the consolidated financial statements or related notes.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on the 3rd day of December 2010.

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington
Gajus V. Worthington
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Gajus V. Worthington and Vikram Jog, and each of them, as his true and lawful attorney-in-fact and agent with full power of substitution, for him in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments or any abbreviated or subsequent registration statement and any amendments thereto filed pursuant to Rule 462(b) and any supplement to any prospectus included in this registration statement or any such amendment or any abbreviated or subsequent registration statement filed pursuant to Rule 462(b)), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact, proxy and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact, proxy and agent, or his substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Gajus V. Worthington Gajus V. Worthington	President, Chief Executive Officer and Director (Principal Executive Officer)	December 3, 2010
/s/ Vikram Jog Vikram Jog	Chief Financial Officer (Principal Accounting and Financial Officer)	December 3, 2010
/s/ Jeremy Loh Jeremy Loh	Director	December 3, 2010
/s/ Samuel Colella Samuel Colella	Director	December 3, 2010
/s/ Kenneth Nussbacher Kenneth Nussbacher	Director	December 3, 2010
/s/ Raymond Whitaker Raymond Whitaker	Director	December 3, 2010
/s/ John A. Young John A. Young	Director	December 3, 2010

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23.2*	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1).
24.1	Power of Attorney (see page II-8 to this registration statement on Form S-1).

* To be filed by amendment.

† Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.

Exhibit 3.1

FIFTH AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION OF

FLUIDIGM CORPORATION

Fluidigm Corporation, a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), certifies that:

A. The name of the corporation is Fluidigm Corporation. The original Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on March 29, 2007.

B. This Fifth Amended and Restated Certificate of Incorporation was duly adopted in accordance with Sections 242 and 245 of the General Corporation Law of the State of Delaware and restates, integrates and further amends the provisions of the Corporation's Fourth Amended and Restated Certificate of Incorporation.

C. The text of the Fourth Amended and Restated Certificate of Incorporation is amended and restated to read as set forth in EXHIBIT A attached hereto.

IN WITNESS WHEREOF, Fluidigm Corporation has caused this Fifth Amended and Restated Certificate of Incorporation to be signed by Gajus V. Worthington, a duly authorized officer of the Corporation, on August 16, 2010.

/s/ Gajus V. Worthington
Gajus V. Worthington,
President and Chief Executive Officer

EXHIBIT A

ARTICLE I

The name of the corporation is Fluidigm Corporation (the "Corporation").

ARTICLE II

The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of the State of Delaware.

ARTICLE III

The address of the Corporation's registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, Delaware 19801. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE IV

1. Classes of Stock. The total number of shares of stock that the Corporation shall have authority to issue is 49,254,205, consisting of 29,252,771 shares of Common Stock, $0.0035 par value per share ("Common Stock") and 20,001,434 shares of Preferred Stock, $0.0035 par value per share ("Preferred Stock"). The Preferred shall be divided into series. The first series shall consist of 779,220 shares and shall be designated Series A Preferred Stock ("Series A Preferred Stock"). The second series shall consist of 1,845,907 shares and shall be designated Series B Preferred Stock ("Series B Preferred Stock"). The third series shall consist of 4,815,606 shares and shall be designated Series C Preferred Stock ("Series C Preferred Stock"). The fourth series shall consist of 13,859 shares and shall be designated Series C-1 Preferred Stock ("Series C-1 Preferred Stock"). The fifth series shall consist of 3,989,217 shares and shall be designated Series D Preferred Stock ("Series D Preferred Stock"). The sixth series shall consist of 116,836 shares and shall be designated Series D-1 Preferred Stock ("Series D-1 Preferred Stock"). The seventh series shall consist of 7,802,775 shares and shall be designated Series E Preferred Stock ("Series E Preferred Stock"). The eighth series shall consist of 638,014 shares and shall be designated Series E-1 Preferred Stock ("Series E-1 Preferred Stock").

The terms and provisions of the Common Stock and Preferred Stock are as follows:

2. Definitions. For purposes of this Article IV, the following definitions shall apply:

(a) "Conversion Price" shall mean $3.85 per share for the Series A Preferred Stock, $6.23 per share for the Series B Preferred Stock, $9.03 per share for the Series C Preferred Stock, $7.00 per share for the Series C-1 Preferred Stock, $9.80 per share for the Series D Preferred Stock, $7.00 per share for the Series D-1 Preferred Stock, $14.00 for the Series E Preferred Stock, and

$7.00 per share for the Series E-1 Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(b) "Convertible Securities" shall mean any evidences of indebtedness, shares or other securities (other than shares of Common Stock) convertible into or exchangeable for Common Stock.

(c) "Corporation" shall mean Fluidigm Corporation.

(d) "Dividend Rate" shall mean an annual rate of $0.385 per share for the Series A Preferred Stock, an annual rate of $0.63 for the Series B Preferred Stock, an annual rate of $0.91 per share for the Series C Preferred Stock, an annual rate of $0.71 per share for the Series C-1 Preferred Stock, an annual rate of $1.05 per share for the Series D Preferred Stock, an annual rate of $0.75 per share for the Series D-1 Preferred Stock, an annual rate of $1.505 per share for the Series E Preferred Stock, and an annual rate of $0.753 per share for the Series E-1 Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(e) "Liquidation Preference" shall mean $3.85 per share for the Series A Preferred Stock, $6.23 per share for the Series B Preferred Stock, $9.03 per share for the Series C Preferred Stock, $7.00 per share for the Series C-1 Preferred Stock, $9.80 per share for the Series D Preferred Stock, $7.00 per share for the Series D-1 Preferred Stock, $14.00 for the Series E Preferred Stock, and $7.00 per share for the Series E-1 Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(f) "Options" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(g) "Original Issue Price" shall mean $3.85 per share for the Series A Preferred Stock, $6.23 per share for the Series B Preferred Stock, $9.03 per share for the Series C Preferred Stock, $7.00 per share for the Series C-1 Preferred Stock, $9.80 per share for the Series D Preferred Stock, $7.00 per share for the Series D-1 Preferred Stock, $14.00 for the Series E Preferred Stock, and $7.00 per share for the Series E-1 Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(h) "Preferred Stock" shall mean the Series A Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock, the Series C-1 Preferred Stock, the Series D Preferred Stock, the Series D-1 Preferred Stock, the Series E Preferred Stock, and Series E-1 Preferred Stock.

3. Dividends.

(a) Series D Preferred Stock, Series D-1 Preferred Stock, Series E Preferred Stock and Series E-1 Preferred Stock. The holders of outstanding shares of Series D Preferred Stock, Series D-1 Preferred Stock, Series E Preferred Stock and Series E-1 Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rates specified for such shares of Preferred Stock, payable in preference and priority to any declaration or payment of any distribution on Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series C-1 Preferred Stock or Common Stock of the Corporation other than a dividend payable solely in Common Stock. No distributions

shall be made with respect to the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series C-1 Preferred Stock or Common Stock during any fiscal year of the Corporation, other than dividends on the Common Stock payable solely in Common Stock, until all dividends at the applicable Dividend Rate on the Series E Preferred Stock, Series E-1 Preferred Stock, Series D Preferred Stock and Series D-1 Preferred Stock have been declared and paid or set apart for payment to the holders of Series E Preferred Stock, Series E-1 Preferred Stock, Series D Preferred Stock and Series D-1 Preferred Stock. Payment of any dividends to the holders of the Series E Preferred Stock, Series E-1 Preferred Stock, Series D Preferred Stock and Series D-1 Preferred Stock shall be on a pro rata, pari passu basis in proportion to the Dividend Rates for the Series E Preferred Stock, Series E-1 Preferred Stock, Series D Preferred Stock and Series D-1 Preferred Stock, as applicable. The right to receive dividends on shares of Series E Preferred Stock, Series E-1 Preferred Stock, Series D Preferred Stock and Series D-1 Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series E Preferred Stock, Series E-1 Preferred Stock, Series D Preferred Stock and Series D-1 Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(b) Series C Preferred Stock and Series C-1 Preferred Stock. The holders of outstanding shares of Series C Preferred Stock and Series C-1 Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Series A Preferred Stock, Series B Preferred Stock or Common Stock of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Series A Preferred Stock, Series B Preferred Stock or Common Stock during any fiscal year of the Corporation, other than dividends on the Common Stock payable solely in Common Stock, until all dividends at the applicable Dividend Rate on the Series C Preferred Stock and Series C-1 Preferred Stock have been declared and paid or set apart for payment to the holders of Series C Preferred Stock and Series C-1 Preferred Stock. The right to receive dividends on shares of Series C Preferred Stock and Series C-1 Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series C Preferred Stock and Series C-1 Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(c) Series A Preferred Stock and Series B Preferred Stock. The holders of outstanding shares of Series A Preferred Stock and the holders of outstanding shares of Series B Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rates specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Common Stock of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Common Stock, other than dividends payable solely in Common Stock, until all dividends at the applicable Dividend Rate on the Preferred Stock have been declared and paid or set apart for payment to the Preferred Stock holders. Payment of any dividends to the holders of the Series A Preferred Stock and Series B Preferred Stock shall be on a pro rata, pari passu basis in proportion to the Dividend Rates for the Series A Preferred Stock and Series B Preferred Stock, as applicable. The right to receive dividends on shares of Series A Preferred Stock and Series B Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series A Preferred Stock or Series B Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(d) Distribution. For purposes of this Section 3, unless the context otherwise requires, a "distribution" shall mean the transfer of cash or other property without consideration whether by way of dividend or otherwise, payable other than in Common Stock, or the purchase or redemption of shares of the Corporation other than (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors; and (ii) repurchase of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors; and (iii) any other repurchase or redemption of capital stock of the corporation unanimously approved by the Board of Directors and approved by the holders of the majority of the Common Stock and the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock, voting as separate classes.

(e) Common Stock. Dividends may be paid on the Common Stock as and when declared by the Board of Directors, subject to the prior dividend rights of the Preferred Stock and Sections 7, 8, 9, and 10 below.

(f) Non-Cash Distributions. Whenever a distribution provided for in this Section 3 shall be payable in property other than cash, the value of such distribution shall be deemed to be the fair market value of such property as determined in good faith by the Board of Directors.

(g) Consent to Certain Repurchases. If Sections 502 and 503 of the California Corporations Code are determined to apply to the Corporation, as authorized by Section 402.5(c) of the California Corporations Code, Sections 502 and 503 of the California Corporations Code shall not apply with respect to payments made by the Corporation in connection with (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors, and (ii) repurchase of Common Stock issued to or held by employees, officers, directors and consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors, and (iii) any other repurchase or redemption of Common Stock unanimously approved by the Board of Directors and approved by the holders of more than two-thirds (2/3) of the outstanding shares of Preferred Stock voting together as a single class.

4 Liquidation Rights.

In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, distribution of the assets of the Corporation legally available for distribution to the Corporation's stockholders shall be made in the following manner:

(a) Series E and Series E-1 Liquidation Preference. The holders of the Series E Preferred Stock and Series E-1 Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the

Series A Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock, the Series C-1 Preferred Stock, the Series D Preferred Stock or the Series D-1 Preferred Stock, by reason of their ownership of such stock, an amount per share for each share of Series E Preferred Stock or Series E-1 Preferred Stock, as applicable, held by them equal to the sum of (i) the Liquidation Preference for such share and (ii) all declared and unpaid dividends on such share of Series E Preferred Stock or Series E-1 Preferred Stock. If the assets of the Corporation legally available for distribution to the holders of the Series E Preferred Stock and Series E-1 Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 4(a), then the entire assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series E Preferred Stock and Series E-1 Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 4(a).

(b) Series D and Series D-1 Liquidation Preference. After payment to the holders of Series E Preferred Stock and Series E-1 Preferred Stock of the full amounts specified in Section 4(a) above, the holders of the Series D Preferred Stock and Series D-1 Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock or the Series C-1 Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series D Preferred Stock or Series D-1 Preferred Stock, as applicable, held by them equal to the sum of (i) the Liquidation Preference for such share and (ii) all declared and unpaid dividends on such share of Series D Preferred Stock or Series D-1 Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of Series D Preferred Stock and Series D-1 Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 4(b), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series D Preferred Stock and Series D-1 Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 4(b).

(c) Series C and Series C-1 Liquidation Preference. After payment to the holders of Series E Preferred Stock, Series E-1 Preferred Stock, Series D Preferred Stock and Series D-1 Preferred Stock of the full amounts specified in Sections 4(a) and 4(b) above, the holders of the Series C Preferred Stock and Series C-1 Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock or the Series B Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series C Preferred Stock or Series C-1 Preferred Stock, as applicable, held by them equal to the sum of (i) the Liquidation Preference for such share and (ii) all declared and unpaid dividends on such share of Series C Preferred Stock or Series C-1 Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series C Preferred Stock and Series C-1 Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 4(c), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series C Preferred Stock and Series C-1 Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 4(c).

(d) Series B Liquidation Preference. After payment to the holders of Series E Preferred Stock, Series E-1 Preferred Stock, Series D Preferred Stock, Series D-1 Preferred Stock, Series C Preferred Stock and Series C-1 Preferred Stock of the full amounts specified in Sections 4(a), 4(b) and 4(c) above, the holders of the Series B Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock or Series A Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series B Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such share and (ii) all declared and unpaid dividends on such share of Series B Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series B Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 4(d), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series B Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 4(d).

(e) Series A Liquidation Preference. After payment to the holders of Series E Preferred Stock, Series E-1 Preferred Stock, Series D Preferred Stock, Series D-1 Preferred Stock, Series C Preferred Stock, Series C-1 Preferred Stock and Series B Preferred Stock of the full amounts specified in Sections 4(a), 4(b), 4(c) and 4(d) above, the holders of the Series A Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock by reason of their ownership of such stock, an amount per share for each share of Series A Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such share and (ii) all declared and unpaid dividends on such share of Series A Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series A Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 4(e), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series A Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 4(e).

(f) Remaining Assets. After the payment to the holders of Preferred Stock of the full amounts specified in Sections 4(a), 4(b), 4(c), 4(d) and 4(e) above, the entire remaining assets of the Corporation legally available for distribution shall be distributed pro rata to holders of the Common Stock of the Corporation in proportion to the number of shares of Common Stock held by them.

(g) Shares Not Treated as Both Preferred Stock and Common Stock in Any Distribution. Shares of Preferred Stock shall not be entitled to be converted into shares of Common Stock in order to participate in any distribution, or series of distributions, as shares of Common Stock, without first foregoing participation in the distribution, or series of distributions, as shares of Preferred Stock.

(h) Reorganization. For purposes of this Section 4, a liquidation, dissolution or winding up of the Corporation shall be deemed to be occasioned by, or to include, (i) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any merger effected exclusively for the purpose of changing the domicile of the

Corporation) other than a transaction or series of transactions in which the holders of the voting securities of the Corporation outstanding immediately prior to such transaction or series of transactions continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Corporation held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Corporation or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, transfer, lease or other conveyance of all or substantially all of the assets of the Corporation.

(i) Valuation of Non-Cash Consideration. If any assets of the Corporation distributed to stockholders in connection with any liquidation, dissolution, or winding up of the Corporation are other than cash, then the value of such assets shall be their fair market value as determined in good faith by the Board of Directors, except that any securities to be distributed to stockholders in a liquidation, dissolution, or winding up of the Corporation shall be valued as follows:

(i) If the securities are then traded on a national securities exchange or the Nasdaq Stock Market System (or a similar national quotation system), then the value of the securities shall be deemed to be to the average of the closing prices of the securities on such exchange or system over the ten (10) trading day period ending five (5) trading days prior to the distribution;

(ii) if the securities are actively traded over-the-counter, then the value of the securities shall be deemed to be the average of the closing bid prices of the securities over the ten (10) trading day period ending five (5) trading days prior to the distribution; or

(iii) if there is no active public market for the securities, then the value of the securities shall be deemed to be the fair market value thereof as determined in good faith by the Board of Directors which determination shall include consideration of the illiquidity of the securities.

In the event of a merger or other acquisition of the Corporation by another entity, the distribution date shall be deemed to the date such transaction closes.

For the purposes of this Section 4(i), "trading day" shall mean any day on which the exchange or system on which the securities to be distributed are traded is open, and "closing prices" or "closing bid prices" shall be deemed to be: (i) for securities traded primarily on the New York Stock Exchange, the American Stock Exchange or Nasdaq, the last reported trade price or sale price, as the case may be, at 4:00 p.m., New York time, on that day and (ii) for securities listed or traded on other exchanges, markets and systems, the market price as of the end of the "regular hours" trading period that is generally accepted as such for such exchange, market or system. If, after the date hereof, the benchmark times generally accepted in the securities industry for determining the market price of a stock as of a given trading day shall change from those set forth above, the fair market value shall be determined as of such other generally accepted benchmark times.

5. Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the "Conversion Rights"):

(a) Right to Convert. Subject to Section 5(c), each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share at the office of the Corporation or any transfer agent for the Preferred Stock, into that number of fully-paid, nonassessable shares of Common Stock determined by dividing the Original Issue Price for the relevant series by the Conversion Price for such series. (The number of shares of Common Stock into which each share of Preferred Stock of a series may be converted is hereinafter referred to as the "Conversion Rate" for each such series.) Upon any decrease or increase in the Conversion Price for any series of Preferred Stock, as described in this Section 5, the Conversion Rate for such series shall be appropriately increased or decreased.

(b) Automatic Conversion. Each share of Preferred Stock shall automatically be converted into fully-paid, non-assessable shares of Common Stock at the then effective Conversion Rate for such share (i) immediately prior to the closing of a firm commitment underwritten initial public offering on Form S-1 (or successor form) filed under the Securities Act of 1933, as amended (the "Securities Act"), covering the offer and sale of the Corporation's Common Stock, provided that the offering price per share is not less than $19.915 (as adjusted for subdivisions and combinations of the Common Stock and changes in the Common Stock as set forth in Sections 5(e) and 5(g)) and the aggregate gross proceeds to the Corporation are not less than $25,000,000, or (ii) upon the receipt by the Corporation of a written consent or request for such conversion from the holders of two-thirds of the shares of Preferred Stock then outstanding, or, if later, the effective date for conversion specified in such requests (each of the events referred to in (i) and (ii) being hereinafter referred to as an "Automatic Conversion Event"). Notwithstanding the foregoing, the Series E Preferred Stock shall not be subject to an Automatic Conversion Event unless either (x) such Automatic Conversion Event is approved by the written consent of holders of more than two-thirds of the shares of Series E Preferred Stock then outstanding, or (y) such Automatic Conversion Event is the closing of a firm commitment underwritten initial public offering on Form S-1 (or successor form) filed under the Securities Act and the requirements of Section 5(b)(i) or 5(b)(ii) are met.

(c) Mechanics of Conversion. No fractional shares of Common Stock shall be issued upon conversion of Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the then fair market value of a share of Common Stock as determined by the Board of Directors. For such purpose, all shares of Preferred Stock held by each holder of Preferred Stock shall be aggregated, and any resulting fractional share of Common Stock shall be paid in cash. Before any holder of Preferred Stock shall be entitled to convert the same into full shares of Common Stock, and to receive certificates therefor, he shall either surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or of any transfer agent for the Preferred Stock, or notify the Corporation or its transfer agent that such certificate or certificates have been lost, stolen or destroyed and execute an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificate or certificates, and shall give written notice to the Corporation at such office that he elects to convert the same; provided, however, that on the date of an Automatic Conversion Event, the outstanding shares of Preferred Stock shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent; provided further, however, that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such Automatic Conversion Event unless either the certificates evidencing such shares of Preferred Stock are delivered to the Corporation or its transfer

agent as provided above, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. On the date of the occurrence of an Automatic Conversion Event, each holder of record of shares of Preferred Stock shall be deemed to be the holder of record of the Common Stock issuable upon such conversion, notwithstanding that the certificates representing such shares of Preferred Stock shall not have been surrendered at the office of the Corporation, that notice from the Corporation shall not have been received by any holder of record of shares of Preferred Stock, or that the certificates evidencing such shares of Common Stock shall not then be actually delivered to such holder.

The Corporation shall, as soon as practicable after such delivery, or after such agreement and indemnification, issue and deliver at such office to such holder of Preferred Stock, a certificate or certificates for the number of shares of Common Stock to which he shall be entitled as aforesaid and a check payable to the holder in the amount of any cash amounts payable as the result of a conversion into fractional shares of Common Stock, plus any declared and unpaid dividends on the converted Preferred Stock. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date; provided, however, that if the conversion is in connection with an underwritten offer of securities registered pursuant to the Securities Act the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing of the sale of securities pursuant to such offering, in which event the person(s) entitled to receive the Common Stock issuable upon such conversion of the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of the sale of such securities.

(d) Adjustments to Conversion Price for Diluting Issues.

(i) Special Definition. For purposes of this Section 5(d), "Additional Shares of Common" shall mean all shares of Common Stock issued (or, pursuant to Section 5(d)(iii), deemed to be issued) by the Corporation after the filing of this Certificate of Incorporation, other than:

(1) shares of Common Stock issued or issuable upon the conversion of the Preferred Stock;

(2) shares of Common Stock issued or issuable to officers, directors and employees of, or consultants and other service providers to, the Corporation pursuant to stock grants, option plans, purchase plans or other employee stock incentive programs or arrangements approved by the Board of Directors or upon exercise of options or warrants granted to such parties pursuant to any such plan, program or arrangement;

(3) shares of Common Stock issued upon the exercise or conversion of Options or Convertible Securities outstanding as of the date of the filing of this Certificate of Incorporation;

(4) shares of Common Stock issued or issuable as a dividend or distribution on Preferred Stock or pursuant to any event for which adjustment is made pursuant to Section 5(e), 5(f) or 5(g) hereof;

(5) shares of Common Stock issued in a registered public offering under the Securities Act pursuant to which all outstanding shares of Preferred Stock are automatically converted into Common Stock pursuant to an Automatic Conversion Event;

(6) shares of Common Stock issued or issuable pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided, that such issuances are unanimously approved by the Board of Directors;

(7) shares of Common Stock issued or issuable to banks, equipment lessors or other financial institutions pursuant to a commercial leasing or debt financing transaction approved by the Board of Directors; and

(8) shares of Common Stock issued or issuable in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements, or strategic partnerships or relationships, if the issuance is approved by the Board of Directors.

(ii) No Adjustment of Conversion Price. No adjustment in the Conversion Price of a particular series of Preferred Stock shall be made in respect of the issuance of Additional Shares of Common unless the consideration per share (as determined pursuant to Section 5(d)(ix)) for an Additional Share of Common issued or deemed to be issued by the Corporation is less than the Conversion Price in effect on the date of, and immediately prior to such issue, for such series of Preferred Stock.

(iii) Deemed Issue of Additional Shares of Common. In the event the Corporation at any time or from time to time after the date of the filing of this Certificate of Incorporation shall issue any Options or Convertible Securities or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein for a subsequent adjustment of such number) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible Securities, the conversion or exchange of such Convertible Securities or, in the case of Options for Convertible Securities, the exercise of such Options and the conversion or exchange of the underlying securities, shall be deemed to have been issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that in any such case in which shares are deemed to be issued:

(1) no further adjustment in the Conversion Price of the Preferred Stock shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock in connection with the exercise of such Options or conversion or exchange of such Convertible Securities pursuant to the terms of such Options or Convertible Securities;

(2) if no adjustment in the Conversion Price of the Preferred Stock was made upon the original issue of (or upon the occurrence of a record date with respect to) such Options or Convertible Securities and such Options or Convertible Securities are revised to provide, or by their terms provide, with the passage of time or otherwise, for any increase or decrease in the consideration payable to the Corporation, or any increase or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, then such Options or Convertible Securities as so revised (and the Additional Shares of Common subject thereto) shall be deemed to have been issued effective upon such increase or decrease becoming effective;

(3) if such Options or Convertible Securities are revised to provide, or by their terms provide, with the passage of time or otherwise, for any increase or decrease in the consideration payable to the Corporation, or any increase or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price of the Preferred Stock computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities;

(4) no readjustment pursuant to clause (3) above shall have the effect of increasing the Conversion Price of the Preferred Stock to an amount which exceeds the lower of (i) the Conversion Price of the Preferred Stock on the original adjustment date, or (ii) the Conversion Price of the Preferred Stock that would have resulted from any issuance of Additional Shares of Common between the original adjustment date and such readjustment date;

(5) upon the expiration of any such Options or any rights of conversion or exchange under such Convertible Securities which shall not have been exercised, the Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto) and any subsequent adjustments based thereon shall, upon such expiration, be recomputed as if:

(A) in the case of Convertible Securities or Options for Common Stock, the only Additional Shares of Common issued were the shares of Common Stock, if any, actually issued upon the exercise of such Options or the conversion or exchange of such Convertible Securities and the consideration received therefor was the consideration actually received by the Corporation for the issue of such exercised Options plus the consideration actually received by the Corporation upon such exercise or for the issue of all such Convertible Securities which were actually converted or exchanged, plus the additional consideration, if any, actually received by the Corporation upon such conversion or exchange, and

(B) in the case of Options for Convertible Securities, only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such Options, and the consideration received by the Corporation for the Additional Shares of Common deemed to have been then issued was the consideration actually received by the Corporation for the issue of such exercised Options, plus the consideration deemed to have been received by the Corporation (determined pursuant to Section 5(d)(ix)) upon the issue of the Convertible Securities with respect to which such Options were actually exercised; and

(6) if such record date shall have been fixed and such Options or Convertible Securities are not issued on the date fixed therefor, the adjustment previously made in the Conversion Price which became effective on such record date shall be canceled as of the close of business on such record date, and thereafter the Conversion Price shall be adjusted pursuant to this Section 5(d)(iii) as of the actual date of their issuance.

(iv) Adjustment of Conversion Price of Series E Preferred Stock Upon Issuance of Additional Shares of Common.

(1) For so long as the Conversion Price of the Series E Preferred Stock is greater than $9.03 (as adjusted for subdivisions and combinations of the Common Stock and changes in the Common Stock as set forth in Sections 5(e) and 5(g)) (the "Series D/E Ratchet Amount"), in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 5(d)(iii)), for a consideration per share less than the applicable Conversion Price of the Series E Preferred Stock in effect on the date of and immediately prior to such issue, but for a consideration per share equal to or greater than the Series D/E Ratchet Amount, then the Conversion Price of the Series E Preferred Stock shall be reduced concurrently with such issue to a price (calculated to the nearest cent) equal to the per share price of the Additional Shares of Common.

(2) In the event the Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 5(d)(iii)) without consideration or for a consideration per share less than the Series D/E Ratchet Amount, then the Conversion Price of the Series E Preferred Stock immediately prior to such issue shall be deemed to be equal to the Series D/E Ratchet Amount (the "Series E Adjusted Conversion Price"), and such Series E Adjusted Conversion Price shall be further reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Series E Adjusted Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Adjusted Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 5(d)(iv)(2), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 5(d)(iii) hereof, shall be deemed to be outstanding. Section 5(d)(iv)(3) shall govern adjustments to the Conversion Price of the Series E Preferred Stock after the first adjustment to the Conversion Price of the Series E Preferred Stock pursuant to this Section 5(d)(iv)(2).

(3) After any adjustment to the Conversion Price of the Series E Preferred Stock pursuant to Section 5(d)(iv)(2), in the event the Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 5(d)(iii)) without consideration or for a consideration per share less than the Conversion Price of the Series E Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series E Preferred Stock shall be reduced concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by

a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 5(d)(iv)(3), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 5(d)(iii) hereof, shall be deemed to be outstanding.

(v) Adjustment of Conversion Price of Series E-1 Preferred Stock Upon Issuance of Additional Shares of Common. In the event the Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 5(d)(iii)) without consideration or for a consideration per share less than the Conversion Price of the Series E-1 Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series E-1 Preferred Stock shall be reduced concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 5(d)(v), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 5(d)(iii) hereof, shall be deemed to be outstanding.

(vi) Adjustment of Conversion Price of Series D Preferred Stock Upon Issuance of Additional Shares of Common.

(1) For so long as the Conversion Price of the Series D Preferred Stock is greater than the Series D/E Ratchet Amount, in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 5(d)(iii)) for a consideration per share less than the applicable Conversion Price of the Series D Preferred Stock in effect on the date of and immediately prior to such issue, but for a consideration per share equal to or greater than the Series D/E Ratchet Amount, then the Conversion Price of the Series D Preferred Stock shall be reduced concurrently with such issue to a price (calculated to the nearest cent) equal to the per share price of the Additional Shares of Common.

(2) In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 5(d)(iii)) without consideration or for a consideration per share less than the Series D/E Ratchet Amount, then the Conversion Price of the Series D Preferred Stock immediately prior to such issue shall be deemed to be equal to the Series D/E Ratchet Amount (the "Series D Adjusted Conversion Price"), and such Series D Adjusted Conversion Price shall be further reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Series D Adjusted Conversion Price by a fraction, the numerator of which shall be the number

of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Series D Adjusted Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 5(d)(vi)(2), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 5(d)(iii) hereof, shall be deemed to be outstanding. Section 5(d)(vi)(3) shall govern adjustments to the Conversion Price of the Series D Preferred Stock after the first adjustment to the Conversion Price of the Series D Preferred Stock pursuant to this Section 5(d)(vi)(2).

(3) After any adjustment to the Conversion Price of the Series D Preferred Stock pursuant to Section 5(d)(vi)(2), in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 5(d)(iii)) without consideration or for a consideration per share less than Conversion Price of the Series D Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series D Preferred Stock shall be reduced concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 5(d)(vi)(3), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 5(d)(iii) hereof, shall be deemed to be outstanding.

(vii) Adjustment of Conversion Price of Series D-1 Preferred Stock Upon Issuance of Additional Shares of Common. In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 5(d)(iii)) without consideration or for a consideration per share less than Conversion Price of the Series D-1 Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series D-1 Preferred Stock shall be reduced concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 5(d)(vii), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 5(d)(iii) hereof, shall be deemed to be outstanding.

(viii) Adjustment of Conversion Price of Series A, B, C and C-1 Preferred Stock Upon Issuance of Additional Shares of Common. In the event the Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 5(d)(iii)) without consideration or for a consideration per share less than the applicable Conversion Price of the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock or Series C-1 Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock or Series C-1 Preferred Stock (if affected) shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 5(d)(viii), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 5(d)(iii) hereof, shall be deemed to be outstanding.

(ix) Determination of Consideration. For purposes of this Section 5(d), the consideration received by the Corporation for the issue (or deemed issue) of any Additional Shares of Common shall be computed as follows:

(1) Cash and Property. Such consideration shall:

(A) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation before deducting reasonable discounts, commissions or other expenses allowed, paid or incurred by the Corporation for any underwriting or otherwise in connection with such issue (or deemed issue);

(B) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(C) in the event Additional Shares of Common are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (A) and (B) above, as reasonably determined in good faith by the Board of Directors.

(2) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common deemed to have been issued pursuant to Section 5(d)(iii) shall be determined by dividing:

(X) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such

consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities by

(Y) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities.

(e) Adjustments for Subdivisions or Combinations of Common Stock. In the event the outstanding shares of Common Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Common Stock, the Conversion Price of each series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Common Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Common Stock, the Conversion Prices in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(f) Adjustments for Subdivisions or Combinations of Preferred Stock. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(g) Adjustments for Reclassification, Exchange and Substitution. Subject to Section 4 above ("Liquidation Rights"), if the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for above), then, in any such event, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive, each holder of such Preferred Stock shall have the right thereafter to convert such shares of Preferred Stock into a number of shares of such other class or classes of stock which a holder of the number of shares of Common Stock deliverable upon conversion of such series of Preferred Stock immediately before that change would have been entitled to receive in such reorganization or reclassification, all subject to further adjustment as provided herein with respect to such other shares.

(h) No Impairment. The Corporation will not through any reorganization, transfer of assets, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation but will at all times in good faith assist in the carrying out of all the provisions of

this Section 5 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of Preferred Stock against impairment. Notwithstanding the foregoing, nothing in this Section 5(h) shall prohibit the Corporation from amending its Certificate of Incorporation with the requisite consent of its stockholders and the board of directors.

(i) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 5, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of Preferred Stock.

(j) Notices of Record Date. In the event that the Corporation shall propose at any time:

(i) to declare any dividend or distribution upon its Common Stock, whether in cash, property, stock or other securities, whether or not a regular cash dividend and whether or not out of earnings or earned surplus;

(ii) to effect any reclassification or recapitalization of its Common Stock outstanding involving a change in the Common Stock; or

(iii) to voluntarily liquidate or dissolve or to enter into any transaction deemed to be a liquidation, dissolution or winding up of the corporation pursuant to Section 4(h);

then, in connection with each such event, the Corporation shall send to the holders of the Preferred Stock at least 14 days' prior written notice of the date on which a record shall be taken for such dividend or distribution (and specifying the date on which the holders of Common Stock shall be entitled thereto) or for determining rights to vote in respect of the matters referred to in (ii) and (iii) above.

Each such written notice shall be given by first class mail, postage prepaid, addressed to the holders of Preferred Stock at the address for each such holder as shown on the books of the Corporation.

The right of the holders of the Preferred Stock to notice hereunder may be waived by the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class. Notwithstanding the foregoing, no waiver of notice under this Section 5(j) shall constitute a waiver of notice with respect to the Series E Preferred Stock or Series E-1 Preferred Stock unless such waiver shall have been approved by the written consent of holders of more than two-thirds (2/3) of the shares of Series E Preferred Stock and Series E-1 Preferred Stock then outstanding, voting together as a single class.

(k) Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

(l) Waiver of Adjustment of Conversion Price. Notwithstanding anything herein to the contrary, any downward adjustment of the Conversion Price of any series of Preferred Stock may be waived by the consent or vote of the holders of more than two-thirds (2/3) of the outstanding shares of such series. Any such waiver shall bind all future holders of shares of such series of Preferred Stock.

6. Voting.

(a) Restricted Class Voting. Except as otherwise expressly provided herein or as required by law, the holders of Preferred Stock and the holders of Common Stock shall vote together and not as separate classes.

(b) No Series Voting. Other than as provided herein or required by law, there shall be no series voting.

(c) Preferred Stock. Each holder of Preferred Stock shall be entitled to the number of votes equal to the number of shares of Common Stock into which the shares of Preferred Stock held by such holder could be converted as of the record date. The holders of shares of the Preferred Stock shall be entitled to vote on all matters on which the Common Stock shall be entitled to vote. Holders of Preferred Stock shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of the Corporation. Fractional votes shall not, however, be permitted and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted), shall be disregarded.

(d) Common Stock. Each holder of shares of Common Stock shall be entitled to one vote for each share thereof held.

(e) Adjustment in Authorized Common Stock. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares of Common Stock then outstanding) by an affirmative vote of the holders of a majority of the outstanding Common Stock and Preferred Stock, voting together as a single class.

(f) Election of Directors. So long as at least 571,428 shares of Series D Preferred Stock (as adjusted for stock splits, subdivisions, combinations or stock dividends with respect to such shares) remain outstanding, the holders of the Series D Preferred Stock, voting as a separate class, shall be entitled to elect two (2) members of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors. So long as at least 571,428 shares of Series C Preferred Stock (as adjusted for stock splits,

subdivisions, combinations or stock dividends with respect to such shares) remain outstanding, the holders of Series C Preferred Stock, voting as a separate class, shall be entitled to elect three (3) members of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors. Any additional members of the Corporation's Board of Directors shall be elected by the holders of Common Stock, Series A Preferred Stock, Series B Preferred Stock, Series C-1 Preferred Stock, Series D-1 Preferred Stock, Series E Preferred Stock and Series E-1 Preferred Stock, voting together as a single class.

7. Amendments and Changes Requiring Approval of Preferred Stock. As long as any of the Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class:

(a) amend, alter or repeal any provision of the Certificate of Incorporation or By-laws of the Corporation (including pursuant to a merger) if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Preferred Stock or any series thereof;

(b) enter into any transaction or series of related transactions deemed to be a liquidation, dissolution or winding up of the Corporation pursuant to Section 4(h) above;

(c) voluntarily liquidate or dissolve;

(d) declare or pay any distribution (as defined in Section 3(d) except for distributions upon a liquidation or dissolution) with respect to the Common Stock of the Corporation;

(e) permit any subsidiary of the Corporation to sell securities to a third party (other than directors' qualifying shares in the case of subsidiaries outside the United States);

(f) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Preferred Stock;

(g) authorize or create (by reclassification, merger or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, liquidation, redemption, conversion or other rights senior to or on a parity with any series of Preferred Stock or with respect to voting senior to any series of Preferred Stock;

(h) increase or decrease the authorized number of directors of the Corporation; or

(i) amend this Section 7.

8. Amendments and Changes Requiring the Approval of the Series E Preferred Stock and Series E-1 Preferred Stock.

(a) As long as any of the Series E Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as

provided by law) of the holders of at least 60% of the outstanding shares of the Series E Preferred Stock and Series E-1 Preferred Stock voting together as a single class:

(i) amend, alter or repeal any provision of the Certificate of Incorporation of the Corporation (including pursuant to a merger) if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series E Preferred Stock in a manner different from any other series of Preferred Stock; or

(ii) amend this Section 8(a).

(b) As long as any of the Series E Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least a majority of the outstanding shares of the Series E Preferred Stock and Series E-1 Preferred Stock voting together as a single class:

(i) declare or pay any distribution (as defined in Section 3(d) except for distributions upon a liquidation or dissolution) with respect to the Common Stock or Preferred Stock of the Corporation; or

(ii) amend this Section 8(b).

(c) As long as any of the Series E Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least 66 2/3% of the outstanding shares of the Series D Preferred Stock, Series D-1 Preferred Stock, Series E Preferred Stock and Series E-1 Preferred Stock voting together as a single class on an as converted to Common Stock basis:

(i) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series E Preferred Stock;

(ii) authorize or create (by reclassification, merger or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series E Preferred Stock or with respect to voting senior to the Series E Preferred Stock; or

(iii) amend this Section 8(c).

9. Amendments and Changes Requiring the Approval of the Series D Preferred Stock and Series D-1 Preferred Stock.

(a) As long as any of the Series D Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least 60% of the outstanding shares of the Series D Preferred Stock and Series D-1 Preferred Stock voting together as a single class:

(i) amend, alter or repeal any provision of the Certificate of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers

of, or restrictions provided for the benefit of the Series D Preferred Stock in a manner different from any other series of Preferred Stock; or

(ii) amend this Section 9(a).

(b) As long as any of the Series D Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least a majority of the outstanding shares of the Series D Preferred Stock and Series D-1 Preferred Stock voting together as a single class:

(i) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series D Preferred Stock;

(ii) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series D Preferred Stock or with respect to voting senior to the Series D Preferred Stock;

(iii) declare or pay any distribution (as defined in Section 3(d) except for distributions upon a liquidation or dissolution) with respect to the Common Stock or Preferred Stock of the Corporation;

(iv) increase the authorized number of directors of the Corporation above eleven (11); or

(v) amend this Section 9(b).

10. Amendments and Changes Requiring the Approval of the Series C Preferred Stock and Series C-1 Preferred Stock. As long as any of the Series C Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least two-thirds (2/3) of the outstanding shares of the Series C Preferred Stock and Series C-1 Preferred Stock voting together as a single class:

(a) amend, alter or repeal any provision of the Certificate of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series C Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series C Preferred Stock;

(c) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series C Preferred Stock or with respect to voting senior to the Series C Preferred Stock;

(d) declare or pay any distribution (as defined in Section 3(d) except for distributions upon a liquidation or dissolution) with respect to the Common Stock or Preferred Stock of the Corporation;

(e) increase the authorized number of directors of the Corporation above eleven (11); or

(f) amend this Section 10.

11. Amendments and Changes Requiring the Approval of the Series B Preferred Stock. As long as any of the Series B Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least two-thirds of the outstanding shares of the Series B Preferred Stock:

(a) amend, alter or repeal any provision of the Certificate of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series B Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series B Preferred Stock; or

(c) amend this Section 11.

12. Status of Converted Stock. In the event any shares of Preferred Stock shall be converted pursuant to Section 5 hereof, then the shares so converted shall be cancelled and shall not be issuable by the Corporation. The Certificate of Incorporation shall be appropriately amended to effect the corresponding reduction in the Corporation's authorized capital stock.

13. Notices. Any notice required by the provisions of this Article IV to be given to the holders of Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at such holder's address appearing on the books of the Corporation.

ARTICLE V

The Corporation reserves the right to amend, alter, change, or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon the stockholders herein are granted subject to this right.

ARTICLE VI

The Corporation is to have perpetual existence.

ARTICLE VII

Elections of directors need not be by written ballot unless a stockholder demands election by written ballot at the meeting and before voting begins or unless the Bylaws of the Corporation shall so provide.

ARTICLE VIII

Unless otherwise set forth herein, the number of directors which constitute the Board of Directors of the Corporation shall be designated in the Bylaws of the Corporation.

ARTICLE IX

In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, alter, amend or repeal the Bylaws of the Corporation.

ARTICLE X

1. Limitation of Directors' Liability. To the fullest extent permitted by the General Corporation Law of the State of Delaware as the same exists or as may hereafter be amended, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director.

2. Indemnification. The Corporation may indemnify to the fullest extent permitted by law any person made or threatened to be made a party to an action or proceeding, whether criminal, civil, administrative or investigative, by reason of the fact that such person or his or her testator or intestate is or was a director, officer or employee of the Corporation, or any predecessor of the Corporation, or serves or served at any other enterprise as a director, officer or employee at the request of the Corporation or any predecessor to the Corporation.

3. Amendments. Neither any amendment nor repeal of this Article X, nor the adoption of any provision of the Corporation's Certificate of Incorporation inconsistent with this Article X, shall eliminate or reduce the effect of this Article X, in respect of any matter occurring, or any action or proceeding accruing or arising or that, but for this Article X, would accrue or arise, prior to such amendment, repeal, or adoption of an inconsistent provision.

ARTICLE XI

Meetings of the stockholders may be held within or without the State of Delaware, as the Bylaws may provide. The books of the Corporation may be kept (subject to any provision contained in the statutes) outside of the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

* * *

BYLAWS OF

FLUIDIGM CORPORATION

(a Delaware corporation)

As Adopted by the Sole Incorporator on March 29, 2007
As Ratified by the Sole Director on April 30, 2007
As Amended on April 7, 2008

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BYLAWS

ARTICLE I — MEETINGS OF STOCKHOLDERS

1.1 ***Place of Meetings***

Meetings of stockholders of Fluidigm Corporation (the "**Company**") shall be held at any place, within or outside the State of Delaware, determined by the Company's board of directors (the "**Board**"). The Board may, in its sole discretion, determine that a meeting of stockholders shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211(a)(2) of the Delaware General Corporation Law (the "**DGCL**"). In the absence of any such designation or determination, stockholders' meetings shall be held at the Company's principal executive office.

1.2 ***Annual Meeting***

An annual meeting of stockholders shall be held for the election of directors at such date and time as may be designated by resolution of the Board from time to time. Any other proper business may be transacted at the annual meeting. The Company shall not be required to hold an annual meeting of stockholders, *provided* that (i) the stockholders are permitted to act by written consent under the Company's certificate of incorporation and these bylaws, (ii) the stockholders take action by written consent to elect directors and (iii) the stockholders unanimously consent to such action or, if such consent is less than unanimous, all of the directorships to which directors could be elected at an annual meeting held at the effective time of such action are vacant and are filled by such action.

1.3 ***Special Meeting***

A special meeting of the stockholders may be called at any time by the Board, Chairperson of the Board, Chief Executive Officer or President (in the absence of a Chief Executive Officer) or by one or more stockholders holding shares in the aggregate entitled to cast not less than 10% of the votes at that meeting.

If any person(s) other than the Board calls a special meeting, the request shall:

(i) be in writing;

(ii) specify the time of such meeting and the general nature of the business proposed to be transacted; and

(iii) be delivered personally or sent by registered mail or by facsimile transmission to the Chairperson of the Board, the Chief Executive Officer, the President (in the absence of a Chief Executive Officer) or the Secretary of the Company.

The officer(s) receiving the request shall cause notice to be promptly given to the stockholders entitled to vote at such meeting, in accordance with these bylaws, that a meeting will be held at the time requested by the person or persons calling the meeting. No business may be transacted at such special meeting other than the business specified in such notice to stockholders. Nothing contained in this paragraph of this **section 1.3** shall be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the Board may be held.

1.4 ***Notice of Stockholders' Meetings***

Whenever stockholders are required or permitted to take any action at a meeting, a written notice of the meeting shall be given which shall state the place, if any, date and hour of the meeting, the means of remote communication, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Except as otherwise provided in the DGCL, the certificate of incorporation or these bylaws, the written notice of any meeting of stockholders shall be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting.

1.5 ***Quorum***

Except as otherwise provided by law, the certificate of incorporation or these bylaws, at each meeting of stockholders the presence in person or by proxy of the holders of shares of stock having a majority of the votes which could be cast by the holders of all outstanding shares of stock entitled to vote at the meeting shall be necessary and sufficient to constitute a quorum. If, however, such quorum is not present or represented at any meeting of the stockholders, then either (i) the chairperson of the meeting, or (ii) the stockholders entitled to vote at the meeting, present in person or represented by proxy, shall have the power to adjourn the meeting from time to time, in the manner provided in **section 1.6**, until a quorum is present or represented.

1.6 ***Adjourned Meeting; Notice***

Any meeting of stockholders, annual or special, may adjourn from time to time to reconvene at the same or some other place, and notice need not be given of the adjourned meeting if the time, place, if any, thereof, and the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the Company may transact any business which might have been transacted at the original meeting. If the adjournment is for more than 30 days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

1.7 ***Conduct of Business***

Meetings of stockholders shall be presided over by the Chairperson of the Board, if any, or in his or her absence by the Vice Chairperson of the Board, if any, or in the absence of the foregoing

persons by the Chief Executive Officer, or in the absence of the foregoing persons by the President, or in the absence of the foregoing persons by a Vice President, or in the absence of the foregoing persons by a chairperson designated by the Board, or in the absence of such designation by a chairperson chosen at the meeting. The Secretary shall act as secretary of the meeting, but in his or her absence the chairperson of the meeting may appoint any person to act as secretary of the meeting. The chairperson of any meeting of stockholders shall determine the order of business and the procedure at the meeting, including such regulation of the manner of voting and the conduct of business.

1.8 ***Voting***

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of **section 1.10** of these bylaws, subject to Section 217 (relating to voting rights of fiduciaries, pledgors and joint owners of stock) and Section 218 (relating to voting trusts and other voting agreements) of the DGCL.

Except as may be otherwise provided in the certificate of incorporation, each stockholder entitled to vote at any meeting of stockholders shall be entitled to one vote for each share of capital stock held by such stockholder which has voting power upon the matter in question. Voting at meetings of stockholders need not be by written ballot and, unless otherwise required by law, need not be conducted by inspectors of election unless so determined by the holders of shares of stock having a majority of the votes which could be cast by the holders of all outstanding shares of stock entitled to vote thereon which are present in person or by proxy at such meeting. If authorized by the Board, such requirement of a written ballot shall be satisfied by a ballot submitted by electronic transmission (as defined in **section 7.2** of these bylaws), *provided* that any such electronic transmission must either set forth or be submitted with information from which it can be determined that the electronic transmission was authorized by the stockholder or proxy holder.

Except as otherwise required by law, the certificate of incorporation or these bylaws, in all matters other than the election of directors, the affirmative vote of a majority of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote on the subject matter shall be the act of the stockholders. Except as otherwise required by law, the certificate of incorporation or these bylaws, directors shall be elected by a plurality of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors.

1.9 ***Stockholder Action by Written Consent Without a Meeting***

Unless otherwise provided in the certificate of incorporation, any action required by the DGCL to be taken at any annual or special meeting of stockholders of a corporation, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice, and without a vote, if a consent or consents in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted.

An electronic transmission (as defined in **section 7.2**) consenting to an action to be taken and transmitted by a stockholder or proxy holder, or by a person or persons authorized to act for a stockholder or proxy holder, shall be deemed to be written, signed and dated for purposes of this section, *provided* that any such electronic transmission sets forth or is delivered with information from which the Company can determine (i) that the electronic transmission was transmitted by the stockholder or proxy holder or by a person or persons authorized to act for the stockholder or proxy holder and (ii) the date on which such stockholder or proxy holder or authorized person or persons transmitted such electronic transmission.

In the event that the Board shall have instructed the officers of the Company to solicit the vote or written consent of the stockholders of the Company, an electronic transmission of a stockholder written consent given pursuant to such solicitation may be delivered to the Secretary or the President of the Company or to a person designated by the Secretary or the President. The Secretary or the President of the Company or a designee of the Secretary or the President shall cause any such written consent by electronic transmission to be reproduced in paper form and inserted into the corporate records.

Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for such meeting had been the date that written consents signed by a sufficient number of holders to take the action were delivered to the Company as provided in Section 228 of the DGCL. In the event that the action which is consented to is such as would have required the filing of a certificate under any provision of the DGCL, if such action had been voted on by stockholders at a meeting thereof, the certificate filed under such provision shall state, in lieu of any statement required by such provision concerning any vote of stockholders, that written consent has been given in accordance with Section 228 of the DGCL.

1.10 ***Record Date for Stockholder Notice; Voting; Giving Consents***

In order that the Company may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or entitled to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board and which record date:

(i) in the case of determination of stockholders entitled to notice of or to vote at any meeting of stockholders or adjournment thereof, shall, unless otherwise required by law, not be more than sixty nor less than ten days before the date of such meeting;

(ii) in the case of determination of stockholders entitled to express consent to corporate action in writing without a meeting, shall not be more than ten days after the date upon which the resolution fixing the record date is adopted by the Board; and

(iii) in the case of determination of stockholders for any other action, shall not be more than 60 days prior to such other action.

If no record date is fixed by the Board:

(i) the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held;

(ii) the record date for determining stockholders entitled to express consent to corporate action in writing without a meeting when no prior action of the Board is required by law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Company in accordance with applicable law, or, if prior action by the Board is required by law, shall be at the close of business on the day on which the Board adopts the resolution taking such prior action; and

(iii) the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board adopts the resolution relating thereto.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting, *provided* that the Board may fix a new record date for the adjourned meeting.

1.11 ***Proxies***

Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for such stockholder by proxy authorized by an instrument in writing or by a transmission permitted by law filed in accordance with the procedure established for the meeting, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212 of the DGCL.

1.12 ***List of Stockholders Entitled to Vote***

The officer who has charge of the stock ledger of the Company shall prepare and make, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. The Company shall not be required to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting for a period of at least ten days prior to the meeting: (i) on a reasonably accessible electronic network, *provided* that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the Company’s principal place of business. In the event that the Company

determines to make the list available on an electronic network, the Company may take reasonable steps to ensure that such information is available only to stockholders of the Company. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

ARTICLE II — DIRECTORS

2.1 ***Powers***

The business and affairs of the Company shall be managed by or under the direction of the Board, except as may be otherwise provided in the DGCL or the certificate of incorporation.

2.2 ***Number of Directors***

The number of directors of the Company shall be not less than seven (7) nor more than thirteen (13). The exact number of directors shall be seven (7) until changed, within the limits specified above, by a bylaw amending this Section 2.2, duly adopted by the Board or by the stockholders. The indefinite number of directors may be changed, or a definite number may be fixed without provision for an indefinite number, by a duly adopted amendment to the certificate of incorporation or by an amendment to this bylaw duly adopted by the vote or written consent of holders of a majority of the outstanding shares entitled to vote; provided, however, that an amendment reducing the fixed number or the minimum number of directors to a number less than seven (7) cannot be adopted if the votes cast against its adoption at a meeting, or the shares not consenting in the case of an action by written consent, are equal to more than sixteen and two-thirds percent (16 2/3%) of the outstanding shares entitled to vote thereon. No amendment may change the stated maximum number of authorized directors to a number greater than two (2) times the stated minimum number of directors minus one (1).

No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires.

2.3 ***Election, Qualification and Term of Office of Directors***

Except as provided in **section 2.4** of these bylaws, and subject to **sections 1.2** and **1.9** of these bylaws, directors shall be elected at each annual meeting of stockholders. Directors need not be stockholders unless so required by the certificate of incorporation or these bylaws. The certificate of incorporation or these bylaws may prescribe other qualifications for directors. Each director shall hold office until such director's successor is elected and qualified or until such director's earlier death, resignation or removal.

2.4 ***Resignation and Vacancies***

Any director may resign at any time upon notice given in writing or by electronic transmission to the Company. A resignation is effective when the resignation is delivered unless the resignation specifies a later effective date or an effective date determined upon the happening of an event or events. A resignation which is conditioned upon the director failing to receive a specified vote for reelection as a director may provide that it is irrevocable. Unless otherwise provided in the certificate of incorporation or these bylaws, when one or more directors resign from the Board, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective.

Unless otherwise provided in the certificate of incorporation or these bylaws:

(i) Vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director.

(ii) Whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the certificate of incorporation, vacancies and newly created directorships of such class or classes or series may be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected.

If at any time, by reason of death or resignation or other cause, the Company should have no directors in office, then any officer or any stockholder or an executor, administrator, trustee or guardian of a stockholder, or other fiduciary entrusted with like responsibility for the person or estate of a stockholder, may call a special meeting of stockholders in accordance with the provisions of the certificate of incorporation or these bylaws, or may apply to the Court of Chancery for a decree summarily ordering an election as provided in Section 211 of the DGCL.

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole Board (as constituted immediately prior to any such increase), the Court of Chancery may, upon application of any stockholder or stockholders holding at least 10% of the voting stock at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the DGCL as far as applicable.

A director elected to fill a vacancy shall be elected for the unexpired term of his or her predecessor in office and until such director’s successor is elected and qualified, or until such director’s earlier death, resignation or removal.

2.5 ***Place of Meetings; Meetings by Telephone***

The Board may hold meetings, both regular and special, either within or outside the State of Delaware.

Unless otherwise restricted by the certificate of incorporation or these bylaws, members of the Board, or any committee designated by the Board, may participate in a meeting of the Board, or any committee, by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

2.6 ***Conduct of Business***

Meetings of the Board shall be presided over by the Chairperson of the Board, if any, or in his or her absence by the Vice Chairperson of the Board, if any, or in the absence of the foregoing persons by a chairperson designated by the Board, or in the absence of such designation by a chairperson chosen at the meeting. The Secretary shall act as secretary of the meeting, but in his or her absence the chairperson of the meeting may appoint any person to act as secretary of the meeting.

2.7 ***Regular Meetings***

Regular meetings of the Board may be held without notice at such time and at such place as shall from time to time be determined by the Board.

2.8 ***Special Meetings; Notice***

Special meetings of the Board for any purpose or purposes may be called at any time by the Chairperson of the Board, the Chief Executive Officer, the President, the Secretary or any two directors.

Notice of the time and place of special meetings shall be:

(i) delivered personally by hand, by courier or by telephone;

(ii) sent by United States first-class mail, postage prepaid;

(iii) sent by facsimile; or

(iv) sent by electronic mail,

directed to each director at that director’s address, telephone number, facsimile number or electronic mail address, as the case may be, as shown on the Company’s records.

If the notice is (i) delivered personally by hand, by courier or by telephone, (ii) sent by facsimile or (iii) sent by electronic mail, it shall be delivered or sent at least 24 hours before the time of the holding of the meeting. If the notice is sent by United States mail, it shall be deposited in the United

States mail at least four days before the time of the holding of the meeting. Any oral notice may be communicated to the director. The notice need not specify the place of the meeting (if the meeting is to be held at the Company's principal executive office) nor the purpose of the meeting.

2.9 ***Quorum; Voting***

At all meetings of the Board, a majority of the total authorized number of directors shall constitute a quorum for the transaction of business. If a quorum is not present at any meeting of the Board, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present. A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

The vote of a majority of the directors present at any meeting at which a quorum is present shall be the act of the Board, except as may be otherwise specifically provided by statute, the certificate of incorporation or these bylaws.

If the certificate of incorporation provides that one or more directors shall have more or less than one vote per director on any matter, every reference in these bylaws to a majority or other proportion of the directors shall refer to a majority or other proportion of the votes of the directors.

2.10 ***Board Action by Written Consent Without a Meeting***

Unless otherwise restricted by the certificate of incorporation or these bylaws, any action required or permitted to be taken at any meeting of the Board, or of any committee thereof, may be taken without a meeting if all members of the Board or committee, as the case may be, consent thereto in writing or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the Board or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

2.11 ***Fees and Compensation of Directors***

Unless otherwise restricted by the certificate of incorporation or these bylaws, the Board shall have the authority to fix the compensation of directors.

2.12 ***Removal of Directors***

Unless otherwise restricted by statute, the certificate of incorporation or these bylaws, any director or the entire Board may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors.

No reduction of the authorized number of directors shall have the effect of removing any director prior to the expiration of such director's term of office.

ARTICLE III — COMMITTEES

3.1 ***Committees of Directors***

The Board may designate one or more committees, each committee to consist of one or more of the directors of the Company. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board or in these bylaws, shall have and may exercise all the powers and authority of the Board in the management of the business and affairs of the Company, and may authorize the seal of the Company to be affixed to all papers that may require it; but no such committee shall have the power or authority to (i) approve or adopt, or recommend to the stockholders, any action or matter (other than the election or removal of directors) expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopt, amend or repeal any bylaw of the Company.

3.2 ***Committee Minutes***

Each committee shall keep regular minutes of its meetings and report the same to the Board when required.

3.3 ***Meetings and Actions of Committees***

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the provisions of:

(i) **section 2.5** (Place of Meetings; Meetings by Telephone);

(ii) **section 2.7** (Regular Meetings);

(iii) **section 2.8** (Special Meetings; Notice);

(iv) **section 2.9** (Quorum; Voting);

(v) **section 2.10** (Board Action by Written Consent Without a Meeting); and

(vi) **section 7.5** (Waiver of Notice)

with such changes in the context of those bylaws as are necessary to substitute the committee and its members for the Board and its members. *However*:

(i) the time of regular meetings of committees may be determined either by resolution of the Board or by resolution of the committee;

(ii) special meetings of committees may also be called by resolution of the Board; and

(iii) notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The Board may adopt rules for the government of any committee not inconsistent with the provisions of these bylaws.

3.4 ***Subcommittees***

Unless otherwise provided in the certificate of incorporation, these bylaws or the resolutions of the Board designating the committee, a committee may create one or more subcommittees, each subcommittee to consist of one or more members of the committee, and delegate to a subcommittee any or all of the powers and authority of the committee.

ARTICLE IV — OFFICERS

4.1 ***Officers***

The officers of the Company shall be a President and a Secretary. The Company may also have, at the discretion of the Board, a Chairperson of the Board, a Vice Chairperson of the Board, a Chief Executive Officer, one or more Vice Presidents, a Chief Financial Officer, a Treasurer, one or more Assistant Treasurers, one or more Assistant Secretaries, and any such other officers as may be appointed in accordance with the provisions of these bylaws. Any number of offices may be held by the same person.

4.2 ***Appointment of Officers***

The Board shall appoint the officers of the Company, except such officers as may be appointed in accordance with the provisions of **section 4.3** of these bylaws.

4.3 ***Subordinate Officers***

The Board may appoint, or empower the Chief Executive Officer or, in the absence of a Chief Executive Officer, the President, to appoint, such other officers and agents as the business of the Company may require. Each of such officers and agents shall hold office for such period, have such authority, and perform such duties as are provided in these bylaws or as the Board may from time to time determine.

4.4 ***Removal and Resignation of Officers***

Any officer may be removed, either with or without cause, by an affirmative vote of the majority of the Board at any regular or special meeting of the Board or, except in the case of an officer chosen by the Board, by any officer upon whom such power of removal may be conferred by the Board.

Any officer may resign at any time by giving written notice to the Company. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice. Unless otherwise specified in the notice of resignation, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the Company under any contract to which the officer is a party.

4.5 ***Vacancies in Offices***

Any vacancy occurring in any office of the Company shall be filled by the Board or as provided in **section 4.3**.

4.6 ***Representation of Shares of Other Corporations***

Unless otherwise directed by the Board, the President or any other person authorized by the Board or the President is authorized to vote, represent and exercise on behalf of the Company all rights incident to any and all shares of any other corporation or corporations standing in the name of the Company. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

4.7 ***Authority and Duties of Officers***

Except as otherwise provided in these bylaws, the officers of the Company shall have such powers and duties in the management of the Company as may be designated from time to time by the Board and, to the extent not so provided, as generally pertain to their respective offices, subject to the control of the Board.

ARTICLE V — INDEMNIFICATION

5.1 ***Indemnification of Directors and Officers in Third Party Proceedings***.

Subject to the other provisions of this **Article V**, the Company shall indemnify, to the fullest extent permitted by the DGCL, as now or hereinafter in effect, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (a "**Proceeding**") (other than an action by or in the right of the Company) by reason of the fact that such person is or was a director or officer of the Company, or is or was a director or officer of the Company serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such Proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Company, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. The termination of any Proceeding by judgment, order, settlement, conviction, or upon a plea of *nolo contendere* or its equivalent, shall not, of itself,

create a presumption that the person did not act in good faith and in a manner which such person reasonably believed to be in or not opposed to the best interests of the Company, and, with respect to any criminal action or proceeding, had reasonable cause to believe that such person's conduct was unlawful.

5.2 ***Indemnification of Directors and Officers in Actions by or in the Right of the Company***

Subject to the other provisions of this **Article V**, the Company shall indemnify, to the fullest extent permitted by the DGCL, as now or hereinafter in effect, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Company to procure a judgment in its favor by reason of the fact that such person is or was a director or officer of the Company, or is or was a director or officer of the Company serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Company; except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Company unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

5.3 ***Successful Defense***

To the extent that a present or former director or officer of the Company has been successful on the merits or otherwise in defense of any action, suit or proceeding described in **section 5.1** or **section 5.2**, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

5.4 ***Indemnification of Others***

Subject to the other provisions of this **Article V**, the Company shall have power to indemnify its employees and agents to the extent not prohibited by the DGCL or other applicable law. The Board shall have the power to delegate to such person or persons the determination of whether employees or agents shall be indemnified.

5.5 ***Advanced Payment of Expenses***

Expenses (including attorneys' fees) incurred by an officer or director of the Company in defending any Proceeding shall be paid by the Company in advance of the final disposition of such Proceeding upon receipt of an undertaking by or on behalf of the person to repay such amounts if it shall ultimately be determined that the person is not entitled to be indemnified under this **Article V** or the DGCL. Such expenses (including attorneys' fees) incurred by former directors and officers or other

employees and agents may be so paid upon such terms and conditions, if any, as the Company deems appropriate.

5.6 ***Limitation on Indemnification and Advancement of Expenses***

Subject to the requirements in **section 5.3** and the DGCL, the Company shall not be required to provide indemnification or, with respect to clauses (i), (iii) and (iv) below, advance expenses to any person pursuant to this **Article V**:

(i) in connection with any Proceeding (or part thereof) initiated by such person except (i) as otherwise required by law, (ii) in specific cases if the Proceeding was authorized by the Board, or (iii) as is required to be made under **section 5.7**;

(ii) in connection with any Proceeding (or part thereof) against such person providing for an accounting or disgorgement of profits pursuant to the provisions of Section 16(b) of the Securities Exchange Act of 1934, as amended, or similar provisions of any federal, state or local statutory law or common law;

(iii) for amounts for which payment has actually been made to or on behalf of such person under any statute, insurance policy or indemnity provision, except with respect to any excess beyond the amount paid; or

(iv) if prohibited by applicable law.

5.7 ***Determination; Claim***

If a claim for indemnification or advancement of expenses under this **Article V** is not paid in full within 60 days after a written claim therefor has been received by the Company, the claimant may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such suit, the Company shall have the burden of proving that the claimant was not entitled to the requested indemnification or advancement of expenses under applicable law.

5.8 ***Non-Exclusivity of Rights***

The indemnification and advancement of expenses provided by, or granted pursuant to, this **Article V** shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under the certificate of incorporation or any statute, bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person’s official capacity and as to action in another capacity while holding such office. The Company is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advancement of expenses, to the fullest extent not prohibited by the DGCL or other applicable law.

5.9 ***Insurance***

The Company may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the Company would have the power to indemnify such person against such liability under the provisions of the DGCL.

5.10 ***Survival***

The rights to indemnification and advancement of expenses conferred by this **Article V** shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

5.11 ***Effect of Repeal or Modification***

Any repeal or modification of this **Article V** shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification.

5.12 ***Certain Definitions***

For purposes of this **Article V**, references to the "**Company**" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this **Article V** with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued. For purposes of this **Article V**, references to "**other enterprises**" shall include employee benefit plans; references to "**fines**" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "**serving at the request of the Company**" shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "**not opposed to the best interests of the Company**" as referred to in this **Article V**.

ARTICLE VI — STOCK

6.1 ***Stock Certificates; Partly Paid Shares***

The shares of the Company shall be represented by certificates, *provided* that the Board may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the Company. Every holder of stock represented by certificates shall be entitled to have a certificate signed by, or in the name of the Company by the Chairperson of the Board or Vice-Chairperson of the Board, or the President or a Vice-President, and by the Treasurer or an Assistant Treasurer, or the Secretary or an Assistant Secretary of the Company representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Company with the same effect as if such person were such officer, transfer agent or registrar at the date of issue. The Company shall not have power to issue a certificate in bearer form.

The Company may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate issued to represent any such partly paid shares, or upon the books and records of the Company in the case of uncertificated partly paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully paid shares, the Company shall declare a dividend upon partly paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

6.2 ***Special Designation on Certificates***

If the Company is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the Company shall issue to represent such class or series of stock; *provided* that, except as otherwise provided in Section 202 of the DGCL, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the Company shall issue to represent such class or series of stock a statement that the Company will furnish without charge to each stockholder who so requests the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

6.3 ***Lost Certificates***

Except as provided in this **section 6.3**, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the Company and cancelled at the same

time. The Company may issue a new certificate of stock or uncertificated shares in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the Company may require the owner of the lost, stolen or destroyed certificate, or such owner's legal representative, to give the Company a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

6.4 ***Dividends***

The Board, subject to any restrictions contained in the certificate of incorporation or applicable law, may declare and pay dividends upon the shares of the Company's capital stock. Dividends may be paid in cash, in property, or in shares of the Company's capital stock, subject to the provisions of the certificate of incorporation.

The Board may set apart out of any of the funds of the Company available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve.

6.5 ***Stock Transfer Agreements***

The Company shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the Company to restrict the transfer of shares of stock of the Company of any one or more classes owned by such stockholders in any manner not prohibited by the DGCL.

6.6 ***Registered Stockholders***

The Company:

(i) shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and to vote as such owner;

(ii) shall be entitled to hold liable for calls and assessments the person registered on its books as the owner of shares; and

(iii) shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of another person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

6.7 ***Transfers***

Transfers of record of shares of stock of the Company shall be made only upon its books by the holders thereof, in person or by an attorney duly authorized, and upon the surrender of a certificate or certificates for a like number of shares, properly endorsed.

ARTICLE VII — MANNER OF GIVING NOTICE AND WAIVER

7.1 ***Notice of Stockholder Meetings***

Notice of any meeting of stockholders, if mailed, is given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the Company's records. An affidavit of the Secretary or an Assistant Secretary of the Company or of the transfer agent or other agent of the Company that the notice has been given shall, in the absence of fraud, be *prima facie* evidence of the facts stated therein.

7.2 ***Notice by Electronic Transmission***

Without limiting the manner by which notice otherwise may be given effectively to stockholders pursuant to the DGCL, the certificate of incorporation or these bylaws, any notice to stockholders given by the Company under any provision of the DGCL, the certificate of incorporation or these bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given. Any such consent shall be revocable by the stockholder by written notice to the Company. Any such consent shall be deemed revoked if:

(i) the Company is unable to deliver by electronic transmission two consecutive notices given by the Company in accordance with such consent; and

(ii) such inability becomes known to the Secretary or an Assistant Secretary of the Company or to the transfer agent, or other person responsible for the giving of notice.

However, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action.

Any notice given pursuant to the preceding paragraph shall be deemed given:

(i) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice;

(ii) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice;

(iii) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting, upon the later of (A) such posting and (B) the giving of such separate notice; and

(iv) if by any other form of electronic transmission, when directed to the stockholder.

An affidavit of the Secretary or an Assistant Secretary or of the transfer agent or other agent of the Company that the notice has been given by a form of electronic transmission shall, in the absence of fraud, be *prima facie* evidence of the facts stated therein.

An "**electronic transmission**" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved, and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

Notice by a form of electronic transmission shall not apply to Sections 164, 296, 311, 312 or 324 of the DGCL.

7.3 ***Notice to Stockholders Sharing an Address***

Except as otherwise prohibited under the DGCL, without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the Company under the provisions of the DGCL, the certificate of incorporation or these bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Any such consent shall be revocable by the stockholder by written notice to the Company. Any stockholder who fails to object in writing to the Company, within 60 days of having been given written notice by the Company of its intention to send the single notice, shall be deemed to have consented to receiving such single written notice.

7.4 ***Notice to Person with Whom Communication is Unlawful***

Whenever notice is required to be given, under the DGCL, the certificate of incorporation or these bylaws, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the Company is such as to require the filing of a certificate under the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

7.5 ***Waiver of Notice***

Whenever notice is required to be given under any provision of the DGCL, the certificate of incorporation or these bylaws, a written waiver, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time of the event for which notice is to be given, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the certificate of incorporation or these bylaws.

ARTICLE VIII — GENERAL MATTERS

8.1 ***Fiscal Year***

The fiscal year of the Company shall be fixed by resolution of the Board and may be changed by the Board.

8.2 ***Seal***

The Company may adopt a corporate seal, which shall be in such form as may be approved from time to time by the Board. The Company may use the corporate seal by causing it or a facsimile thereof to be impressed or affixed or in any other manner reproduced.

8.3 ***Annual Report***

The Company shall cause an annual report to be sent to the stockholders of the Company to the extent required by applicable law. If and so long as there are fewer than 100 holders of record of the Company's shares, the requirement of sending an annual report to the stockholders of the Company is expressly waived (to the extent permitted under applicable law).

8.4 ***Construction; Definitions***

Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the DGCL shall govern the construction of these bylaws. Without limiting the generality of this provision, the singular number includes the plural, the plural number includes the singular, and the term "person" includes both a corporation and a natural person.

ARTICLE IX — AMENDMENTS

These bylaws may be adopted, amended or repealed by the stockholders entitled to vote. However, the Company may, in its certificate of incorporation, confer the power to adopt, amend or repeal bylaws upon the directors. The fact that such power has been so conferred upon the directors shall not divest the stockholders of the power, nor limit their power to adopt, amend or repeal bylaws.

A bylaw amendment adopted by stockholders which specifies the votes that shall be necessary for the election of directors shall not be further amended or repealed by the Board.

Exhibit 4.2

FLUIDIGM CORPORATION

SERIES E PREFERRED STOCK PURCHASE AGREEMENT

First Closing: June 13, 2006
Second Closing: December 22, 2006
Third Closing: March 30, 2007
Fourth Extended Closing: October 10, 2007
Fifth Extended Closing: October 26, 2007
Sixth Extended Closing: December 31, 2007

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

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EXHIBITS

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SERIES E PREFERRED STOCK PURCHASE AGREEMENT

THIS SERIES E PREFERRED STOCK PURCHASE AGREEMENT is made as of June 13, 2006, by and among Fluidigm Corporation, a California corporation (the " **Company** "), and the purchasers listed on the Schedule of Purchasers attached hereto as EXHIBIT A (the " **Schedule of Purchasers** "). The persons or entities listed thereon are hereinafter referred to collectively as the " **Purchasers** " and individually as a " **Purchaser** ."

THE PARTIES HEREBY AGREE AS FOLLOWS:

1. Purchase and Sale of Preferred Stock.

1.1 Authorization of the Shares. The Company will on or before the Closing (as defined below) authorize the sale and issuance pursuant to this Agreement of up to 5,000,000 shares (the " **Shares** ") of its Series E Preferred Stock (the " **Series E Preferred** "), having the rights, preferences and privileges as set forth in the Amended and Restated Articles of Incorporation attached hereto as EXHIBIT B (the " **Restated Articles** ").

1.2 Purchase and Sale of the Shares. Subject to the terms and conditions hereof and in reliance upon the representations, warranties and agreements contained herein, the Company will issue and sell to each Purchaser, severally and not jointly, and each Purchaser will purchase from the Company, severally and not jointly, at the Closing, the number of Shares set forth opposite the Purchaser's name on the Schedule of Purchasers, at a purchase price of Four Dollars ($4.00) per Share. The Company shall be entitled to sell any unpurchased Shares to any Purchaser or to a person who is not a Purchaser and to amend the Schedule of Purchasers to include the information relating to such sales, and such purchasers shall be considered "Purchasers" and parties to this Agreement; provided that (i) such sales are made pursuant to this Agreement or an agreement identical to this one except for the Closing Date and exhibits, and (ii) such sales are completed within 120 days of the Initial Closing (as defined below). The Company's agreement with each Purchaser is a separate agreement, and the sale of the Shares to each Purchaser is a separate sale.

1.3 Closing Date. The first closing of the purchase and sale of the Shares hereunder (the "**Initial Closing**") shall be held at the offices of Wilson Sonsini Goodrich & Rosati, 650 Page Mill Road, Palo Alto, California 94304 on June 13, 2006 (the " **Closing Date** ") or such other date as the Company and a majority-in-interest of the Purchasers may agree. Subject to Section 1.2 above, subsequent closings under this Agreement may be held from time to time after the Initial Closing at such time and place as the Company and the relevant Purchasers agree (" **Subsequent Closings** "). For the purposes of this Agreement, the term " **Closing** " and " **Closing Date** " unless otherwise indicated, refers to the closing or date of closing of the purchase and sale of the Shares with respect to a particular Purchaser or group of Purchasers, whether such closing occurs at the Initial Closing or at a Subsequent Closing.

1.4 Delivery. At Closing, the Company shall deliver to each Purchaser a certificate, in such denomination and registered in Purchaser's name as set forth on the Schedule of Purchasers, representing the number of Shares which Purchaser is purchasing from the Company

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against delivery to the Company of a check or wire transfer payable to the order of the Company in the amount of the purchase price of the Shares to be purchased by such Purchaser.

2. Representations and Warranties of the Company. The Company hereby represents and warrants to Purchaser that, except as set forth in the Schedule of Exceptions attached hereto as EXHIBIT C (the " **Schedule of Exceptions** "), which has been delivered to each Purchaser prior to Purchaser's execution hereof, each of the representations, warranties and statements contained in this Section 2 is true and correct as of the date of this Agreement and will be true and correct on and as of the Closing Date. For all purposes of this Agreement, the statements contained in the Schedule of Exceptions shall also be deemed to be representations and warranties made and given by Company under this Agreement.

2.1 Organization, Good Standing and Qualification. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of California and has all requisite corporate power and authority to carry on its business as currently conducted. The Company is duly qualified to transact business and is in good standing in each jurisdiction in which the failure to so qualify, individually or in the aggregate, would have a material adverse effect on its business (as now conducted), properties, or financial condition.

2.2 Corporate Power. The Company will have at the Closing all requisite legal and corporate power and authority to (i) execute and deliver this Agreement; (ii) sell and issue the Shares hereunder; (iii) issue the Common Stock issuable upon conversion of the Shares (the " **Conversion Shares** "); and (iv) carry out and perform its obligations under the terms of this Agreement.

2.3 Subsidiaries. The Company does not presently own or control, directly or indirectly, any interest in any other corporation, association, or other business entity.

2.4 Capitalization. The authorized capital stock of the Company consists, or immediately prior to the Initial Closing will consist, of 77,857,144 shares of Common Stock (" **Common Stock** "), of which 9,274,356 shares are issued and outstanding immediately prior to the Initial Closing and 51,687,948 shares of Preferred Stock (" **Preferred Stock** "), 2,727,273 of which are designated Series A Preferred Stock of which 2,727,273 are outstanding immediately prior to the Initial Closing; 6,460,675 of which are designated Series B Preferred Stock of which 6,460,675 are outstanding immediately prior to the Initial Closing; 17,000,000 of which are designated Series C Preferred Stock, 16,364,832 of which are issued and outstanding immediately prior to the Initial Closing; and 15,500,000 of which are designated Series D Preferred Stock, 11,714,048 of which are issued and outstanding immediately prior to the Initial Closing; and 10,000,000 of which are designated Series E Preferred Stock, none of which will be outstanding immediately prior to the Initial Closing. All such issued and outstanding shares have been duly authorized and validly issued in compliance with applicable laws, and are fully paid and nonassessable.

The Company has reserved: (i) 5,000,000 shares of Series E Preferred for issuance hereunder and 5,000,000 shares of Common Stock for issuance upon conversion of such shares of Series E Preferred; (ii) 11,714,048 shares of Common Stock for issuance upon conversion of the outstanding

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shares of Series D Preferred; (iii) 916,335 shares of Series D Preferred for issuance upon exercise of outstanding warrants and 916,335 shares of Common Stock for issuance upon conversion of such Series D Preferred; (iv) 16,364,832 shares of Common Stock for issuance upon conversion of the outstanding shares of Series C Preferred Stock; (v) 294,868 shares of Series C Preferred Stock for issuance upon exercise of outstanding warrants and 294,868 shares of Common Stock for issuance upon conversion of such Series C Preferred Stock; (vi) 6,460,675 shares of Common Stock for issuance upon conversion of the outstanding Series B Preferred Stock; (vii) 2,727,273 shares of Common Stock for issuance upon conversion of the outstanding Series A Preferred Stock; and (viii) an aggregate of 10,800,000 shares of Common Stock for issuance to employees and consultants of the Company pursuant to the Company's 1999 Stock Option Plan, pursuant to which options to purchase 5,597,763 shares are granted and outstanding and 1,554,643 shares are available for future grant. Other than with respect to the shares reserved for issuance in the preceding sentence, or as set forth in the Ancillary Agreements (as defined below), there are no outstanding rights, options, warrants, conversion rights, preemptive rights, rights of first refusal or similar rights for the purchase or acquisition from the Company of any securities of the Company. There are no outstanding obligations of the Company to repurchase or redeem any of its securities.

Except as contemplated in the Investor Rights Agreement (as defined below), the Company has not granted or agreed to grant any registration rights, including piggyback rights, to any person or entity. Except as contemplated in the Second Amended and Restated Voting Agreement dated as of August 16, 2005, the Company is not a party or subject to any agreement or understanding, and to the Company's knowledge, there is no agreement or understanding between any person or entities, which relates to the voting or the giving of written consents with respect to any security of the Company or by a director of the Company.

2.5 Authorization. All corporate action on the part of the Company, its officers, directors and shareholders necessary for the authorization, execution and delivery of this Agreement, the Eighth Amended and Restated Investor Rights Agreement in the form attached hereto as EXHIBIT D (the " **Investor Rights Agreement** "), the performance of all obligations of the Company under this Agreement and the Investor Rights Agreement (other than those registration obligations contained in Section 1 of the Investor Rights Agreement), and any other agreements to which the Company is a party, the execution and delivery of which is a contemplated hereby (the " **Ancillary Agreements** ") and the authorization, issuance (or reservation for issuance), sale and delivery of the Shares and the Conversion Shares has been taken or will be taken prior to the Closing. This Agreement and the Investor Rights Agreement constitute valid and legally binding obligations of the Company, enforceable against the Company in accordance with their respective terms, subject to: (i) judicial principles limiting the availability of specific performance, injunctive relief, and other equitable remedies; (ii) bankruptcy, insolvency, reorganization, moratorium or other similar laws now or hereafter in effect generally relating to or affecting creditors' rights; and (iii) limitations on the enforceability of the indemnification provisions of the Investor Rights Agreement.

2.6 Valid Issuance of Preferred and Common Stock. The Shares that are being purchased by the Purchasers hereunder, when issued, sold and delivered in accordance with the

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terms of this Agreement for the consideration expressed herein, will be duly and validly issued, fully paid, and nonassessable, and will be free of restrictions on transfer other than restrictions on transfer under this Agreement and the Investor Rights Agreement and under applicable state and federal securities laws. The Conversion Shares have been duly and validly reserved for issuance, and, upon issuance in accordance with the terms of the Restated Articles, will be duly and validly issued, fully paid, and nonassessable and will be free of restrictions on transfer other than restrictions on transfer under this Agreement and the Investor Rights Agreement and under applicable state and federal securities laws. The Conversion Shares may be issued without any registration or qualification under state and federal securities laws as such laws are currently in effect.

2.7 Governmental Consents. No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority on the part of the Company is required in connection with the offer, sale or issuance of the Shares or the Conversion Shares or the consummation of any other transaction contemplated hereby, except for (a) the filing of the Restated Articles with the Secretary of State of the State of California prior to the Closing and (b) filings required pursuant to applicable federal and state securities laws and blue sky laws, which filings, the Company covenants to complete within the required statutory period.

2.8 Litigation. There is no action, suit, proceeding or investigation pending or, to the Company's knowledge, currently threatened against the Company before any court, administrative agency or other governmental body which questions the validity of this Agreement or the Investor Rights Agreement or the right of the Company to enter into any of them, or to consummate the transactions contemplated hereby or thereby, or which could result, either individually or in the aggregate, in any material adverse change in the condition (financial or otherwise), business, property, assets or liabilities of the Company, nor is the Company aware that there is any basis for the foregoing. The Company is not a party or subject to, and none of its assets is bound by, the provisions of any order, writ, injunction, judgment or decree of any court or government agency or instrumentality. There is no action, suit, proceeding or investigation by or involving the Company currently pending or that the Company intends to initiate.

2.9 Employees. Each employee of the Company has executed a proprietary information and invention assignment agreement substantially in the form or forms made available to the Purchasers. To the Company's knowledge, no officer or key employee is in violation of any prior employee contract or proprietary information agreement. No employees of the Company are represented by any labor union or covered by any collective bargaining agreement. There is no pending or, to the Company's knowledge, threatened labor dispute involving the Company and any group of its employees. The Company is not aware that any officer or key employee intends to terminate his or her employment with the Company within the six months after Closing. The Company does not have a present intention to terminate the employment of any officer or key employee. Each officer and key employee is devoting 100% of his or her business time to the conduct of the business of the Company. The Company is not aware that any officer or key employee intends to work less than full time during the six months after Closing. Subject to general

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principles related to wrongful termination of employees, the employment of each officer and employee of the Company is terminable at will.

2.10 Patents and Other Intangible Assets.

(a) The Company owns, or is licensed or otherwise has the legally enforceable right to use, all copyrights, domain names, maskworks, applications for the issuance or registration of any of the foregoing, trade secrets, confidential or proprietary know-how, data and information, ideas, inventions, designs, developments, algorithms, processes, schematics, techniques, computer programs, applications and other software, works of authorship, creative effort and, to the Company's knowledge after such investigation as the Company deemed reasonable, patents, patent applications, trademarks (including service marks and design marks) and applications therefor, tradenames (all of the foregoing generically, " **Intellectual Property Rights** ") utilized in, or necessary for, its business as now conducted (collectively, the " **Company Intellectual Property** ") without infringing upon the right of any person, corporation or other entity.

(b) Section 2.10 of the Schedule of Exceptions lists (i) all patents and patent applications and all registered and unregistered trademarks, trade names, copyrights and maskworks and registered domain names included in the Company Intellectual Property, including the jurisdictions in which each such intellectual property right has been issued or registered or in which any application for such issuance or registration has been filed, (ii) all licenses, sublicenses, collaborations and other agreements (or options for any of the foregoing) to which the Company is a party and pursuant to which any person, corporation or other entity is authorized to use any of the Company Intellectual Property, and (iii) all licenses, sublicenses, collaborations and other agreements (or options for any of the foregoing) to which the Company is a party and pursuant to which the Company is authorized to use any Intellectual Property Right of any third party (other than standard licenses for commercially available software). Each of the agreements in (ii) and (iii) above remain in full force and effect and, to the Company's knowledge, no party to any such agreement is in material breach or default under such agreement, and the Company is not aware of any act or failure to act by a party which would constitute a material breach or default under any such agreement, give rise to a right of the licensor to terminate any such agreement or otherwise result in termination of, or suspension or loss of exclusive rights under, any such agreement.

(c) To the Company's knowledge, the Company has not infringed or misappropriated any Intellectual Property Right of any other person, corporation or other entity. The Company has not received any communication or otherwise received any information alleging any such conduct by the Company or asserting a claim by any third party to the ownership of, or right to use, any of the Company Intellectual Property, and the Company does not know of any basis for any such claim. The Company is not aware of any action, suit, proceeding or investigation pending or currently threatened against the Company (or any third party owner or licensor of rights to the Company of any of the Company Intellectual Property) which would have a material impact on the Company's ownership of or exclusive or co-exclusive rights to use, the Company Intellectual Property.

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(d) The Company is not aware that any of its employees is obligated under any agreement, or subject to any judgment, decree or order of any court or administrative agency, that would materially interfere with his or her ability to fully and freely perform their duties to the Company or that would conflict with the Company's business. To the Company's knowledge, neither the filing of the Restated Articles nor the execution and delivery of this Agreement or the Investor Rights Agreement, nor the carrying on of the Company's business by the employees of the Company, will conflict with or result in a material breach of the terms, conditions, or provisions of, or constitute a default under, any agreement under which any such employee is now obligated. The Company does not utilize, and will not be required to utilize, any invention, development or work of authorship of any of its employees (or persons it currently intends to hire) made prior to their employment by the Company.

(e) Except as described in Schedule 2.10, (i) the Company is not obligated, or under any liability whatsoever to make any payments by way of royalties, fees or otherwise, to any owner or licensor of, or other claimant to, any Company Intellectual Property, and (ii) the Company is not a party to any agreement concerning the Company Intellectual Property or any other Intellectual Property Right used or to be used by the Company in its business as conducted. No founder, director, officer or employee of the Company, or, to the Company's knowledge, no shareholder of the Company has any interest in the Company Intellectual Property.

(f) Except with respect to any rights granted under the agreements described in Schedule 2.10, the Company owns exclusively all rights arising from or associated with the research and development efforts of the Company, its founders, employees and independent contractors relating to the Company's business as now conducted, and all such rights form part of the Company Intellectual Property. The Company has secured valid written assignments from all employees and independent contractors who contributed to the creation or development of any of the Company Intellectual Property of the rights to such contributions that the Company does not already own by operation of law. The Company has not received notice of any claim being asserted by any current or former employee, independent contractor or other third party to the ownership, of or right to use, any of the Company Intellectual Property, or challenging or questioning the validity of any of the Company Intellectual Property, and the Company is not aware of any basis for any such claim.

(g) The Company has taken reasonable steps to protect and preserve the confidentiality of all material trade secrets included in Company Intellectual Property not otherwise protected by patents or copyright (" **Confidential Information** "). All disclosure of Confidential Information to a third party has been pursuant to the terms of a written confidentiality or non-disclosure agreement between the Company and such third party.

(h) The Company hereby represents and warrants that the data, written and oral reports and other representations and information that the Company provided to its investors (or their counsel) pertaining to the Company Intellectual Property, when taken as a whole, were truthful and, to the Company's knowledge, accurate in all material respects, and there was no omission therefrom which made such information misleading, or incomplete in any material way .

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2.11 Compliance with Other Instruments. The Company is not in violation or default of any provision of its Articles of Incorporation or Bylaws, each as amended and in effect on and as of the Closing. The Company is not in violation or default of any material provision of any instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order or obligation to which it is a party or by which it or any of its properties or assets are bound or, to the best of its knowledge, of any provision of any federal, state or local statute, rule or governmental regulation. The execution, delivery and performance of and compliance with this Agreement and the Investor Rights Agreement, and the issuance and sale of the Shares, will not result in any such violation, be in conflict with or constitute, with or without the passage of time or giving of notice, a default under any such provision, license, indenture, instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order or obligation; or require any consent or waiver under any such provision, license, indenture, instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order or obligation (other than any consents or waivers that have been obtained); or result in the creation of any mortgage, pledge, lien, encumbrance or charge upon any of the properties or assets of the Company pursuant to any such provision, license, indenture, instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order or obligation.

2.12 Permits. The Company has all franchises, permits, licenses, and any similar authority necessary for the conduct of its business as now being conducted by it. The Company is not in default in any material respect under any of such franchises, permits, licenses, or other similar authority.

2.13 Environmental and Safety Laws. To its knowledge, the Company is not in violation of any applicable statute, law, or regulation relating to the environment or occupational health and safety, and to its knowledge, no material expenditures by the Company are or will be required in order to comply with any such existing statute, law, or regulation.

2.14 Title to Property and Assets. The Company has good and marketable title to all of its properties and assets free and clear of all pledges, mortgages, liens security interests, charges and encumbrances, except liens for current taxes and assessments not yet due and possible minor liens and encumbrances which do not, in any case, individually or in the aggregate, materially detract from the value of the property subject thereto or materially impair the ownership or use of said property or assets, or the operations of the Company. With respect to the property and assets it leases, the Company is in compliance with such leases and, to the best of its knowledge, holds a valid leasehold interest free of all liens, claims or encumbrances. The Company's properties and assets are in good condition and repair in all material respects.

2.15 Agreements; Action.

(a) Except for agreements contemplated by this Agreement, there are no agreements, understandings or proposed transactions between the Company and any of its officers, directors, affiliates, or any affiliate thereof other than standard option grants and stock purchase agreements entered into prior to the date of this Agreement.

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(b) There are no agreements, understandings, instruments, contracts, proposed transactions, judgments, orders, writs or decrees to which the Company is a party or by which it is bound that may involve (i) obligations (contingent or otherwise) of, or payments by the Company in excess of, $100,000, other than in the ordinary course of business, (ii) the license of any patent, copyright, trade secret or other proprietary right to or from the Company other than standard commercial software licenses, (iii) provisions restricting or adversely affecting the development, manufacture or distribution of the Company's products or services, or (iv) indemnification by the Company with respect to infringements of proprietary rights other than indemnifications entered into in the ordinary course of business.

(c) For the purposes of subsection (b) above, all indebtedness, liabilities, agreements, understandings, instruments, contracts and proposed transactions involving the same person or entity (including persons or entities the Company has reason to believe are affiliated therewith) shall be aggregated for the purpose of meeting the individual minimum dollar amounts of such subsection.

(d) The Company is not a party to and is not bound by any contract, agreement or instrument, or subject to any restriction under its Restated Articles or its Bylaws that adversely affects its business as now conducted, its properties or its financial condition.

(e) The Company is not a guarantor or indemnitor of any indebtedness of any other person or entity.

(f) The Company has not engaged in the past three months in any discussion (i) with any representative of any entity or entities regarding the merger of the Company with or into any such entity or entities or any affiliate thereof, (ii) with any representative of any entity or any individual regarding the sale, conveyance or disposition of all or substantially all of the assets of the Company or a transaction or series of related transactions in which more than fifty percent (50%) of the voting power of the Company would be disposed of, or (iii) regarding any other form of liquidation, dissolution or winding up of the Company.

2.16 Financial Statements. The Company has made available to each Purchaser its unaudited balance sheet dated as of December 31, 2005 and the unaudited statement of operations for the fiscal year then ended, its unaudited balance sheet as of March 31, 2006, and its unaudited statement of operations and cash flow statement covering the three month period then ended (collectively, the " **Financial Statements** "). The Financial Statements are complete and correct in all material respects and have been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods indicated. The Financial Statements accurately set out and describe the financial condition and operating results of the Company as of the date, and during the periods, indicated therein. Except as set forth in the Financial Statements, the Company has no material liabilities, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to March 31, 2006 and (ii) obligations under contracts and commitments incurred in the ordinary course of business and not required under generally accepted accounting principles to be reflected in the Financial Statements, which, in both cases, individually or in the aggregate are not material to the financial condition or operating results of the Company.

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2.17 Changes. Since March 31 2006:

(a) the Company has not (i) declared or paid any dividends or authorized or made any distribution upon or with respect to any class or series of its capital stock, (ii) incurred any indebtedness for money borrowed or any other liabilities outside the ordinary course of its business individually in excess of $100,000 or, in the case of indebtedness and/or liabilities individually less than $100,000, in excess of $200,000 in the aggregate, (iii) made any loans or advances to any person, other than ordinary advances for reimbursable businesses expenses, (iv) sold, exchanged, assigned, transferred, licensed or otherwise disposed of any of its assets or rights (including Company Intellectual Property), other than the sale of its inventory in the ordinary course of business, (v) waived or compromised a valuable right or a material debt owed to it, (vi) materially changed any compensation arrangement or agreement with any employee, officer, director or shareholder, or (vii) arranged or committed to do any of the things described in this subsection (a); and

(b) there has not been (i) a loss of, or a material order cancellation by, any major customer of the Company, (ii) any damage, destruction or loss, whether or not covered by insurance, materially and adversely affecting the business, properties, or financial condition of the Company, (iii) any change in the assets, liabilities, financial condition or operating results of the Company from that reflected in the Financial Statements, except changes in the ordinary course of business that have not been, in the aggregate, materially adverse, (iv) any resignation or termination of any officer or key employee of the Company, and the Company is not aware of the impending resignation or termination of employment of any such officer, or (v) to the best of the Company's knowledge, any other event or condition of any character that would materially and adversely affect the business, properties, or financial condition of the Company.

2.18 Brokers or Finders. The Company has not agreed to incur, directly or indirectly, any liability for brokerage or finders' fees, agents' commissions or other similar charges in connection with this Agreement or any of the transactions contemplated hereby.

2.19 Qualified Small Business Stock.

(a) As of and immediately following the Closing, the Shares will meet each of the requirements for qualification as "qualified small business stock" set forth in Section 1202(c) of the Internal Revenue Code of 1986, as amended (the " **Code** "), including without limitation the following: (i) the Company will be a domestic C corporation, (ii) the Company will not have made any purchases of its own stock described in Code Section 1202(c)(3)(B) during the one-year period preceding the Closing, and (iii) the Company's (and any predecessor's) aggregate gross assets, as defined by Code Section 1202(d)(2), at no time from the date of incorporation of the Company and through the Closing have exceeded or will exceed $50 million, taking into account the assets of any corporations required to be aggregated with the Company in accordance with Code Section 1202(d)(3).

(b) As of the Closing, at least 80% (by value) of the assets of the Company are used by it in the active conduct of one or more qualified trades or businesses, as defined by Code

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Section 1202(e)(3), and the Company is an eligible corporation, as defined by Code Section 1202(e)(4).

2.20 Employee Benefit Plans. The Company does not have any Employee Benefit Plan as defined in the Employee Retirement Income Security Act of 1974 other than the Company's 401(k) Plan. The Company is in material compliance with the terms of the Company's 401(k) Plan and has not received notice of any material increase in the costs of such plans.

2.21 Tax Matters. The Company has filed all tax returns and reports as required by law. These returns and reports are true and correct in all material respects. The Company has paid all taxes and other assessments due. The Company has not elected pursuant to the Code, to be treated as a Subchapter S corporation or a collapsible corporation pursuant to Section 1362(a) or Section 341(f) of the Code, nor has it made any other elections pursuant to the Code (other than elections that relate solely to methods of accounting, depreciation or amortization) that would have a material effect on the business, properties or condition (financial or otherwise) of the Company. None of the Company's tax returns have ever been audited by any governmental authorities. The Company has withheld or collected from each payment made to its employees the amount of all taxes (including without limitation, federal income taxes, Federal Insurance Contribution Act taxes and Federal Unemployment Tax Act taxes) required to be withheld or collected therefrom, and has paid the same to the proper tax receiving officers or authorized depositories.

2.22 Insurance. The Company has in full force and effect fire and casualty insurance policies, with extended coverage, sufficient in amount (subject to reasonable deductibles) to allow it to replace any of its properties that might be damaged or destroyed. The Company has obtained term life insurance payable to the Company on the lives of Stephen Quake and Gajus Worthington in the amount of $500,000. The Company has in full force and effect directors and officers liability insurance, covering all of its directors, with aggregate coverage in the amount of $2,000,000.

2.23 Corporate Documents. The Restated Articles and Bylaws of the Company are in the form made available to the Purchasers. The copy of the minute books of the Company made available to the Purchasers' counsel contains true and correct minutes of all meetings of directors (including any committees thereof) and shareholders and all actions by written consent taken without a meeting by the directors and shareholders since December 18, 2003.

2.24 Disclosure. The Company has fully provided each Purchaser with all the information which such Purchaser has requested in connection with the purchase of the Shares hereunder, as well as all information which the Company in its judgment believes is reasonably necessary to enable such Purchaser to make a decision as to whether to invest in the Company. Neither this Agreement with the Exhibits hereto, nor any other statements, certificates or documents made or delivered in connection herewith or therewith, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements herein or therein not misleading in light of the circumstances under which they were made. The financial projections made available to the Purchasers (the " **Projections** ") were prepared in good faith and based upon assumptions that the Company believes are reasonable, and represent the Company's good faith

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estimate of its future plans and results; provided however that the Company does not represent or warrant that it will achieve any of the Projections.

2.25 Offering. Subject in part to the truth and accuracy of each Purchaser's representations set forth in this Agreement, the offer, sale and issuance of the Shares as contemplated by this Agreement is exempt from the registration requirements of the Securities Act of 1933, as amended (the " **Securities Act** "), and from the registration or qualification requirements of applicable state securities laws or blue sky laws, and neither the Company nor any authorized agent acting on its behalf will take any action hereafter that would cause the loss of such exemption.

2.26 Returns and Complaints. The Company has not received customer complaints concerning alleged defects in the design of its products that, if true, would have, individually or in the aggregate, a material adverse effect on its business, properties, or financial condition.

3. Representations and Warranties of the Purchasers. Each Purchaser, individually and not jointly, hereby represents and warrants as of the Closing Date that:

3.1 Experience. Such Purchaser is experienced in evaluating start-up companies such as the Company, is able to evaluate and represent its own interests in transactions such as the one contemplated by this Agreement, has such knowledge and experience in financial and business matters such that Purchaser is capable of evaluating the merits and risks of Purchaser's prospective investment in the Company, and has the ability to bear the economic risks of its investment.

3.2 Investment. Such Purchaser is acquiring the Shares, and the Conversion Shares, for investment for such Purchaser's own account and not with the view to, or for resale in connection with, any distribution thereof. Such Purchaser understands that the Shares, and the Conversion Shares have not been registered under the Securities Act by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent as expressed herein. Such Purchaser further represents that it does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participation to any third person with respect to any of the Shares, or the Conversion Shares, other than a transfer not involving a change of beneficial ownership. Such Purchaser understands and acknowledges that the offering of the Shares pursuant to this Agreement will not be registered under the Securities Act on the ground that the sale provided for in this Agreement is exempt from the registration requirements of the Securities Act.

3.3 Rule 144. Such Purchaser acknowledges that the Shares and the Conversion Shares must be held indefinitely unless subsequently registered under the Securities Act or an exemption from such registration is available. Such Purchaser is aware of the provisions of Rule 144 promulgated under the Securities Act which permit limited resale of shares purchased in a private placement subject to the satisfaction of certain conditions. Such Purchaser covenants that, in the absence of an effective registration statement covering the stock in question, such Purchaser will sell, transfer, or otherwise dispose of the Shares or the Conversion Shares only in a manner consistent with applicable securities laws and such Purchaser's representations and covenants set forth in this Section 3. In connection therewith, such Purchaser acknowledges that the Company

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will make a notation on its stock books regarding the restrictions on transfers set forth in this Section 3 and will transfer securities on the books of the Company only to the extent not inconsistent therewith.

3.4 Legends. Purchaser understands and acknowledges that the certificate evidencing its Shares and the Conversion Shares will be imprinted with legends in the form set forth in Section 1.3 of the Investor Rights Agreement.

3.5 No Public Market. Such Purchaser understands that no public market now exists for any of the securities issued by the Company, and that the Company has made no assurances that a public market will ever exist for the Shares or the Conversion Shares.

3.6 Access to Data. Such Purchaser has received and reviewed information about the Company and has had an opportunity to discuss the Company's business, management and financial affairs with its management and to review the Company's facilities. The foregoing, however, does not limit or modify the representations and warranties of the Company in Section 2 of this Agreement or the right of the Purchasers to rely thereon.

3.7 Authorization. This Agreement when executed and delivered by such Purchaser will constitute a valid and legally binding obligation of the Purchaser, enforceable against the Purchaser in accordance with its terms, subject to: (i) judicial principles respecting election of remedies or limiting the availability of specific performance, injunctive relief, and other equitable remedies; (ii) bankruptcy, insolvency, reorganization, moratorium or other similar laws now or hereafter in effect generally relating to or affecting creditors' rights; and (iii) limitations on the enforceability of the indemnification provisions of the Investor Rights Agreement.

3.8 Accredited Investor. Such Purchaser acknowledges that it is an "accredited investor" as defined in Rule 501 of Regulation D as promulgated by the Securities and Exchange Commission under the Securities Act and shall submit to the Company such further assurances of such status as may be reasonably requested by the Company. The principal address of such Purchaser is as set forth on the Schedule of Purchasers.

3.9 Public Solicitation. Purchaser knows of no public solicitation or advertisement of an offer in connection with the proposed issuance and sale of the Shares.

3.10 Tax Advisors. Purchaser has reviewed with Purchaser's own tax advisors the federal, state and local tax consequences of this investment, where applicable, and the transactions contemplated by this Agreement. Each Purchaser is relying solely on such advisors and not on any statements or representations of the Company or any of its agents and understands that each Purchaser (and not the Company) shall be responsible for the Purchaser's own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

3.11 Purchaser Counsel. Purchaser acknowledges that it has had the opportunity to review this Agreement, the exhibits and the schedules attached hereto and the transactions contemplated by this Agreement with Purchaser's own legal counsel. Each Purchaser is relying

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solely on such counsel and not on any statements or representations of the Company or any of its agents for legal advice with respect to this investment or the transactions contemplated by this Agreement.

3.12 Brokers or Finders. The Company has not incurred and will not incur, directly or indirectly, as a result of any action taken by such Purchaser, any liability for brokerage or finders' fees or agents' commissions or any similar changes in connection with this Agreement.

3.13 Non-United States Persons. If Purchaser is not a United States person, such Purchaser hereby represents that such Purchaser is satisfied as to the full observance of the laws of such Purchaser's jurisdiction in connection with any invitation to subscribe for the Shares and the Conversion Shares or any use of this Agreement, the Investor Rights Agreement and the Voting Agreement, including (i) the legal requirements within such Purchaser's jurisdiction for the purchase of Shares and the Conversion Shares, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained and (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of such securities. Such Purchaser's subscription and payment for, and such Purchaser's continued beneficial ownership of, the Shares and the Conversion Shares will not violate any applicable securities or other laws of such Purchaser's jurisdiction.

4. Conditions of Purchaser's Obligations at Closing. The obligations of each Purchaser under this Agreement are subject to the fulfillment on or before the Closing of each of the following conditions, the waiver of which shall not be effective against any Purchaser who does not consent in writing thereto:

4.1 Representations and Warranties. The representations and warranties of the Company contained in Section 2 shall be true on and as of the Closing with the same effect as though such representations and warranties had been made on and as of the date of the Closing.

4.2 Performance. The Company shall have performed and complied with all agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the Closing.

4.3 Compliance Certificate. The President of the Company shall deliver to each Purchaser at the Closing a certificate stating that the conditions specified in Sections 4.1 and 4.2 have been fulfilled and stating that as of the Closing there shall have been no adverse change in the business, affairs, operations, properties, assets or condition of the Company.

4.4 Blue Sky. The Company shall have obtained all necessary permits and qualifications, if any, or secured an exemption therefrom, required by any state or country prior to the offer and sale of the Shares.

4.5 Opinion of Company Counsel. Each Purchaser in the Initial Closing shall have received from Wilson Sonsini Goodrich & Rosati, Professional Corporation, counsel for the Company, an opinion, dated as of the Initial Closing, in the form attached hereto as EXHIBIT E.

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4.6 Investor Rights Agreement. The Company and each Purchaser shall have entered into the Investor Rights Agreement.

4.7 Restated Articles. The Restated Articles shall have been accepted for filing by the California Secretary of State and shall be in full force and effect as of the Closing Date.

4.8 Corporate Proceedings; Waivers and Consents. All corporate and other proceedings to be taken and all waivers, consents and permits necessary or appropriate for the consummation of the transactions contemplated by this Agreement will have been taken or obtained.

5. Conditions of the Company's Obligations at Closing. The obligations of the Company to each Purchaser under this Agreement are subject to the fulfillment on or before the Closing of each of the following conditions by that Purchaser:

5.1 Representations and Warranties. The representations and warranties of the Purchasers contained in Section 3 shall be true on and as of the Closing with the same effect as though such representations and warranties had been made on and as of the Closing.

5.2 Payment of Purchase Price. Each Purchaser shall have delivered the purchase price against delivery of the Shares as set forth in Section 1.4 by the Company to such Purchaser.

5.3 Blue Sky. The Company shall have obtained all necessary permits and qualifications, if any, or secured an exemption therefrom, required by any state or country for the offer and sale of the Shares.

5.4 Investor Rights Agreements. The Company and each Purchaser shall have entered into the Investor Rights Agreement.

5.5 Restated Articles. The Restated Articles shall have been accepted for filing by the California Secretary of State and shall be in full force and effect as of the Closing Date.

5.6 Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated at the Closing hereby, and all documents and instruments incident to these transactions, shall be reasonably satisfactory in substance to the Company and its counsel.

6. Miscellaneous.

6.1 Governing Law; Jurisdiction. This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed in all respects by the laws of the State of California, without regard to any provisions thereof relating to conflicts of laws among different jurisdictions. The parties hereto agree to submit to the exclusive jurisdiction of the federal and state courts of San Mateo County, California with respect to the breach or interpretation of this Agreement or the enforcement of any and all rights, duties, liabilities, obligations, powers, and other relations between the parties arising under this Agreement.

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6.2 Indemnification. The Company shall indemnify, defend and hold each Purchaser harmless against all liability, loss or damage (collectively, " **Losses** " and individually, a " **Loss** ") arising from any litigation, proceeding or dispute arising from such Purchaser's status as a shareholder of the Company other than Losses arising from such Purchaser's gross negligence or willful misconduct, provided that such indemnification shall apply only to litigation, proceedings or disputes arising prior to the Company's Initial Public Offering (as defined in the Investor Rights Agreement) and the Company's obligation to indemnify any Purchaser shall be limited in amount to the amount paid by such Purchaser for the purchase of such Purchaser's Shares as set forth on EXHIBIT A. The foregoing indemnity is not intended to supercede or replace the indemnification obligations of the parties set forth in Section 1.10 of the Investor Rights Agreement nor shall it be construed to limit any other rights and remedies of the Purchasers under this Agreement or any other indemnification to which such Purchaser may be entitled under any other agreement of the Company. The foregoing indemnification rights are transferable only to Affiliates (as defined in the Investor Rights Agreement) of a Purchaser.

6.3 Survival. The representations, warranties, covenants and agreements made herein shall survive any investigation made by any Purchaser or the Company and the Closing of the transactions contemplated hereby; provided, however, that such representations and warranties are only made as of the date of such execution and delivery and as of such Closing.

6.4 Successors and Assigns. Except as otherwise provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto; provided, however, that the rights of a Purchaser to purchase Shares at the Closing shall not be assignable without the consent of the Company.

6.5 Entire Agreement; Amendment. This Agreement and the other documents delivered pursuant hereto constitute the full and entire understanding and agreement among the parties with regard to the subjects hereof and thereof relating to the purchase of the Shares. Neither this Agreement nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument signed by the Company and the holder or holders of greater than fifty percent (50%) of the then-outstanding Shares or the Conversion Shares. Notwithstanding the foregoing, any additional purchaser pursuant to Section 1.2 may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement and such purchaser shall be deemed a Purchaser hereunder. The parties agree that the Schedule of Purchasers attached hereto as Exhibit A shall be updated automatically without any formal amendment to reflect the addition of any such additional Purchaser. Any amendment or waiver effected in accordance with this Section 6.5 shall be binding upon the Purchasers and each transferee of the Shares (or the Common Stock issuable upon conversion thereof), each future holder of all such securities, and the Company.

6.6 Notices, Etc. All notices and other communications required or permitted hereunder, shall be in writing and shall be personally delivered, sent by facsimile, mailed by registered or certified mail, postage prepaid, return receipt requested, or delivered by a nationally recognized overnight courier, addressed (a) if to a Purchaser, at such Purchaser's address or

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facsimile number set forth on the Schedule of Purchasers, or at such other address or facsimile number as such Purchaser shall have furnished to the Company in writing, or (b) if to the Company, at its address or facsimile number set forth on the signature page to this Agreement addressed to the attention of the Corporate Secretary, or at such other address or facsimile number as the Company shall have furnished to the Purchasers. Any such notice or communication shall be deemed to have been received (A) in the case of personal delivery or delivery by telecopier, on the date of such delivery, (B) in the case of a commercial overnight courier, on the next business day after the date when sent and (C) in the case of mailing, on the fifth business day following that on which the piece of mail containing such communication is posted.

6.7 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any holder of any Shares upon any breach or default of the Company under this Agreement shall impair any such right, power or remedy of such holder, nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any holder of any breach or default under this Agreement, or any waiver on the part of any holder of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing or as provided in this Agreement. All remedies, either under this Agreement or by law or otherwise afforded to any holder, shall be cumulative and not alternative.

6.8 California Corporate Securities Law. THE SALE OF THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF SUCH SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO SUCH QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM THE QUALIFICATION BY SECTION 25100, 25102, OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS AGREEMENT ARE EXPRESSLY CONDITIONED UPON SUCH QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.

6.9 Finder's Fee. The Company and each Purchaser shall each indemnify and hold the other harmless from any liability for any commission or compensation in the nature of a finder's fee (including the costs, expenses and legal fees of defending against such liability) for which the Company or the Purchasers, or any of their respective partners, employees, or representatives, as the case may be, is responsible.

6.10 Expenses. The Company and each Purchaser shall bear its own expenses and legal fees incurred on its behalf with respect to this Agreement and the transactions contemplated hereby.

6.11 Waiver of Conflict. Each of the Purchasers and the Company acknowledges that Wilson Sonsini Goodrich & Rosati, Professional Corporation (" **WSGR** ") may have represented and may currently represent Purchasers. In the course of such representation, WSGR may have

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come into possession of confidential information relating to such Purchasers. Each of the Purchasers and the Company acknowledges that WSGR is representing only the Company in this transaction. Pursuant to Rule 3-310 of the Rules of Professional Conduct promulgated by the State Bar of California, an attorney must avoid representations in which the attorney has or had a relationship with another party interested in the representation without the informed written consent of all parties affected. By executing this Agreement, each of the Purchasers and the Company hereby waives any actual or potential conflict of interest that may arise in this financing as a result of WSGR's representation of such persons or entities, WSGR's possession of such confidential information and the participation by WSGR's affiliate in the financing. Each of the Purchasers and the Company represents that it has had the opportunity to consult with independent counsel concerning the giving of this waiver.

6.12 Severability. In the event that any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect without said provision; provided that no such severability shall be effective if it materially changes the economic benefit of this Agreement to any party.

6.13 Counterparts; Facsimile. This Agreement may be executed in any number of counterparts, each of which may be executed by less than all Purchasers, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument. This Agreement may be executed by facsimile signature.

6.14 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

6.15 Exculpation Among Purchasers. Each Purchaser acknowledges that it is not relying upon any person, firm or corporation (including without limitation any other Purchaser), other than the Company and its officers and directors (acting in their capacity as representatives of the Company), in deciding to invest and in making its investment in the Company. Each Purchaser agrees that no other Purchaser nor the respective controlling persons, officers, directors, partners, agents or employees of any other Purchaser shall be liable to such Purchaser for any losses incurred by such Purchaser in connection with its investment in the Company.

6.16 Like Treatment of Holders. The Company shall not directly or indirectly pay or cause to be paid any consideration, whether by way of interest, fee, payment for the redemption or exchange of Preferred Stock, or otherwise to any holder of Preferred Stock for or as inducement to, any consent, waiver or amendment of any term or provision of the Preferred Stock, this Agreement or the Investor Rights Agreement unless equivalent consideration is offered on equivalent terms and conditions to all Purchasers of Preferred Stock under this Agreement bound by such consent, waiver or amendment.

6.17 Jury Trial. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING (WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATED TO THIS AGREEMENT.

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IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

FLUIDIGM CORPORATION

By: /s/ Gajus Worthington
Gajus Worthington
President and Chief Executive Officer

7100 Shoreline Court
South San Francisco, CA 94080
FAX: (650) 871-7195

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

PURCHASER:

ALLIANCEBERNSTEIN L.P.

By: /s/ Adam Spilka

Name: Adam Spilka

Title: SVP, Counsel, Secretary

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT A

SCHEDULE OF PURCHASERS

Name and Address	Shares of Series E	Purchase Price
AllianceBernstein L.P.	1,250,000	$ 5,000,000.00
TOTALS	**1,250,000**	**$ 5,000,000.00**

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

FLUIDIGM CORPORATION

AMENDMENT NO. 1 TO
SERIES E PREFERRED STOCK PURCHASE AGREEMENT

This Amendment No. 1 (the "**Amendment**") to that certain Series E Preferred Stock Purchase Agreement, dated as of June 13, 2006 (the "**Purchase Agreement**"), is made and entered into effective as of December 22, 2006 (the **"Effective Date**") by and among Fluidigm Corporation, a California corporation (the **"Company**"), and the Purchasers named therein. Capitalized terms used in this Amendment that are not otherwise defined herein shall have the respective meanings assigned to them in the Purchase Agreement.

RECITALS

WHEREAS, the Company previously sold and issued an aggregate of 1,250,000 shares of Series E Preferred Stock of the Company (the "**Series E Preferred**") pursuant to the terms of the Purchase Agreement at the Initial Closing held on June 13, 2006;

WHEREAS, the Company and the Purchaser now desire to amend the terms of the Purchase Agreement to provide that the Company may sell and issue additional shares of Series E Preferred pursuant to the Purchase Agreement, at one or more additional Subsequent Closings, provided that any such additional Subsequent Closings shall take place no later than March 31, 2007.

WHEREAS, pursuant to Section 6.5 of the Purchase Agreement, the terms of the Purchase Agreement may be amended upon the written consent of the Company and the holder or holders of greater than fifty percent (50%) of the outstanding Shares or the Conversion Shares; and

WHEREAS, the Purchaser who has signed below holds greater than fifty percent (50%) of the outstanding Shares purchased under the Purchase Agreement as of the Effective Date and consents to the changes as set forth in this Amendment.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto mutually agree as follows:

AGREEMENT

1. Amendment to Section 1.1. Section 1.1 (Authorization of the Shares) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"1.1 Authorization of the Shares. The Company will on or before the Closing (as defined below) authorize the sale and issuance pursuant to this Agreement of up to 6,318,333 shares (the "**Shares**") of its

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Series E Preferred Stock (the "**Series E Preferred**"), having the rights, preferences and privileges as set forth in the Amended and Restated Articles of Incorporation attached hereto as EXHIBIT B (the "**Restated Articles**")."

2. Amendment to Section 1.2. Section 1.2 (Purchase and Sale of the Shares) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"1.2 Purchase and Sale of the Shares. Subject to the terms and conditions hereof and in reliance upon the representations, warranties and agreements contained herein, the Company will issue and sell to each Purchaser, severally and not jointly, and each Purchaser will purchase from the Company, severally and not jointly, at the Closing, the number of Shares set forth opposite the Purchaser's name on the Schedule of Purchasers, at a purchase price of Four Dollars ($4.00) per Share. The Company shall be entitled to sell any unpurchased Shares to any Purchaser or to a person who is not a Purchaser and to amend the Schedule of Purchasers to include the information relating to such sales, and such purchasers shall be considered "Purchasers" and parties to this Agreement; provided that (i) such sales are made pursuant to this Agreement or an agreement identical to this one except for the Closing Date and exhibits, and (ii) such sales are completed on or prior to March 31, 2007. The Company's agreement with each Purchaser is a separate agreement, and the sale of the Shares to each Purchaser is a separate sale."

3. Governing Law. This Amendment shall be governed in all respects by the laws of the State of California, without regard to any provisions thereof relating to conflicts of laws among different jurisdictions.

4. Purchase Agreement. Wherever necessary, all other terms of the Purchase Agreement are hereby amended to be consistent with the terms of this Amendment. Except as specifically set forth herein, the Purchase Agreement shall remain in full force and effect.

5. Counterparts; Facsimile. This Amendment may be executed in any number of counterparts, each of which shall be an original, and all of which together shall constitute one instrument. Executed signatures transmitted via facsimile will be accepted and considered duly executed.

6. Effect of Execution of Amendment by Certain Purchaser. This Amendment, when executed and delivered by the Company and a Purchaser purchasing shares of Series E Preferred at a Subsequent Closing held on or after the date hereof, shall also constitute and shall be deemed a counterpart signature page to the Purchase Agreement. Consequently, each undersigned Purchaser purchasing shares of Series E Preferred at a Subsequent Closing held on or after the date hereof acknowledges and agrees that he, she or it is bound by the terms and

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

conditions contained in the Purchase Agreement, as amended by this Amendment, with respect to the purchase of such shares.

[*Remainder of page intentionally left blank*]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

COMPANY:

FLUIDIGM CORPORATION
a California corporation

By: /s/ Gajus Worthington
Gajus Worthington,
President and Chief Executive Officer

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASER:

CROSS CREEK CAPITAL, L.P.

By: Cross Creek Capital GP, L.P.
Its Sole General Partner

By: Cross Creek Capital, LLC
Its Sole General Partner

By: Wasatch Advisors, Inc.
Its Sole Member

By: /s/ Karey Barker

Name: Karey Barker

Title: Vice President

CROSS CREEK CAPITAL EMPLOYEES' FUND, L.P.

By: Cross Creek Capital GP, L.P.
Its Sole General Partner

By: Cross Creek Capital, LLC
Its Sole General Partner

By: Wasatch Advisors, Inc.
Its Sole Member

By: /s/ Karey Barker

Name: Karey Barker

Title: Vice President

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASER:

WASATCH FUNDS, INC.
Wasatch Small Cap Growth Fund

By: Wasatch Advisors, Inc.
Its: Investment Adviser

By: /s/ Dan Thurber
Name: Dan Thurber

Title: Vice President

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASER:

SMALLCAP WORLD FUND, INC.

By: Capital Research and Management Company,
its, investment adviser

By: /s/ Michael Downer

Name: Michael Downer

Title:

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASER:

ALLIANCEBERNSTEIN VENTURE FUND I, L.P.

By: **AllianceBernstein ESG Venture Management, L.P., its general partner**

By: **AllianceBernstein Global Derivatives Corporation, its general partner**

By: /s/ James D. Kiggen

Name: James D. Kiggen

Title: Senior Vice President

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASER:

VERSANT AFFILIATES FUND 1-A, L.P.
VERSANT AFFILIATES FUND 1-B, L.P.
VERSANT SIDE FUND I, L.P.
VERSANT VENTURE CAPITAL I, L.P.

By: Versant Ventures I, LLC
its General Partner

By: /s/ Samuel D. Colella

Name: Samuel D. Colella

Title: Managing Director

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASER:

LEHMAN BROTHERS HEALTHCARE VENTURE CAPITAL L.P.

By: Lehman Brothers HealthCare Venture Capital Associates L.P.,
its General Partner
By: LB I Group Inc., its General Partner

By: /s/ Michael Odrich
Name: Michael Odrich
Its: Senior Vice President

LEHMAN BROTHERS P.A. LLC

By: /s/ Michael Odrich
Name: Michael Odrich
Its: Senior Vice President

LEHMAN BROTHERS PARTNERSHIP ACCOUNT 2000/2001, L.P.

By: LB I Group Inc., its General Partner

By: /s/ Michael Odrich
Name: Michael Odrich
Its: Senior Vice President

LEHMAN BROTHERS OFFSHORE PARTNERSHIP ACCOUNT 2000/2001, L.P.

By: LB I Offshore Partners Group Ltd., its General Partner

By: /s/ Michael Odrich
Name: Michael Odrich
Its: Senior Vice President

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASER:

EUCLIDSR PARTNERS, L.P.

By: EuclidSR Associates, L.P.
its General Partner

By: /s/ Elaine V. Jones

Name: Elaine V. Jones

Title: General Partner

EUCLIDSR BIOTECHNOLOGY PARTNERS, L.P.

By: EuclidSR Biotechnology Associates, L.P.
its General Partner

By: /s/ Elaine V. Jones

Name: Elaine V. Jones

Title: General Partner

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASER:

IINTERWEST PARTNERS VII, L.P.

By: InterWest Management Partners VII, LLC
its General Partner

By: /s/ Michael Sweeney

Name: Michael Sweeney

Title: As agent for the general partner

INTERWEST INVESTORS VII, L.P.

By: InterWest Management Partners VII, LLC
its General Partner

By: /s/ Michael Sweeney

Name: Michael Sweeney

Title: As agent for the general partner

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASER:

LILLY BIOVENTURES, ELI LILLY & COMPANY

By: /s/ Thomas W. Grein

Name: Thomas W. Grein

Title: Vice President and Treasurer

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASER:

ALLOY VENTURES 2005, L.P.

By: Alloy Ventures 2005, LLC
its General Partner

By: /s/ Tony DiBona

Name: Toni DiBona

Title: Managing Member of Alloy Ventures 2005 LLC

ALLOY VENTURES 2002, L.P.
ALLOY PARTNERS 2002, L.P.

By: Alloy Ventures 2002, LLC
its General Partner

By: /s/ Tony DiBona

Name: Tony DiBona

Title: Managing Member of Alloy Ventures 2002, LLC, the general partner of Alloy Partners 2002, L.P. and Alloy Ventures 2002, L.P.

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASER:

SIGHTLINE HEALTHCARE FUND III, L.P.

By: /s/ Kenneth E. Higgins

Name: Kenneth E. Higgins

Title: Managing Director of Sightline Partners LLC, general partner of its general partner

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASER:

/s/ Bruce Burrows

BRUCE BURROWS

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the 30th day of March, 2007.

PURCHASER:

/s/ John M. Harland

JOHN M. HARLAND

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the 30th day of March, 2007.

PURCHASER:

FERGUSON/EGAN FAMILY TRUST DATED 6/28/99

By: /s/ Rodney A. Ferguson
Name: Rodney A. Ferguson
Title: Trustee

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the 30th day of March, 2007.

PURCHASER:

HEALTH CARE ADMINISTRATION COMPANY

By: /s/ Gary L. Bowers
Name: Gary L. Bowers
Title: President

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the 30th day of March, 2007.

PURCHASER:

THE CONDON FAMILY TRUST

By: /s/ Thomas J. Condon
Name: Thomas J. Condon
Title: Trustee

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the 30th day of March, 2007.

PURCHASER:

IN-Q-TEL, INC.

By: /s/ Scott G. Yancey
Name: Scott G. Yancey
Title: Executive Vice President

IN-Q-TEL EMPLOYEE FUND, LLC

By: /s/ Scott G. Yancey
Name: Scott G. Yancey
Title: EVP of In-Q-Tel, Inc., the manager of the fund

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the 30th day of March, 2007.

PURCHASER:

THE V FOUNDATION FOR CANCER RESEARCH

By: /s/ Nicholas Valvano
Name: Nicholas Valvano
Title: Chief Executive Officer

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the 30th day of March, 2007.

PURCHASER:

/s/ Fredrick H. Stern
FREDRICK H. STERN

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the 30th day of March, 2007.

PURCHASER:

/s/ Alfred J. Mandel
ALFRED J. MANDEL

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the 30th day of March, 2007.

PURCHASER:

/s/ Pauline E. van Ysendoorn
PAULINE E. VAN YSENDOORN

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the 30th day of March, 2007.

PURCHASER:

/s/ Rhett E. Brown
RHETT E. BROWN

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 1 to Series E Preferred Stock Purchase Agreement as of the 30th day of March, 2007.

PURCHASER:

SMALLCAP WORLD FUND, INC.

By: Capital Research and Management Company, its investment adviser

By: /s/ Timothy D. Amour
Name: Timothy D. Armour
Title: President

[Signature Page to Amendment No. 1 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT A
SCHEDULE OF PURCHASERS
SERIES E PREFERED STOCK FINANCING
DECEMBER 22, 2006

Name	Shares of Series E Preferred Stock	Purchase Price
CLIPPERBAY & CO.		
SMALLCAP World Fund, Inc.	1,875,000	$7,500,000.00
PACO c/o 80-16-200-1037662		
Cross Creek Capital, L.P.	569,074	$2,276,296.00
PACO c/o 80-16-200-1037670	55,926	$ 223,704.00
CLEARMOON & CO.	625,000	$2,500,000.00
ALLIANCEBERNSTEIN VENTURE FUND I, L.P.	62,500	$ 250,000.00
ALLOY VENTURES 2005, L.P.	80,625	$ 322,500.00
ALLOY VENTURES 2002, L.P.	78,505	$ 314,020.00
ALLOY PARTNERS 2002, L.P.	2,120	$ 8,480.00
INTERWEST INVESTORS VII, L.P.	2,285	$ 9,140.00
INTERWEST PARTNERS VII, L.P.	47,715	$ 190,860.00
EUCLIDSR BIOTECHNOLOGY PARTNERS, L.P.	105,875	$ 423,500.00
EUCLIDSR PARTNERS, L.P.	105,875	$ 423,500.00
VERSANT AFFLIATES FUND 1-A, L.P.	5,000	$ 20,000.00
VERSANT AFFLIATES FUND 1-B, L.P.	10,500	$ 42,000.00

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT A
SCHEDULE OF PURCHASERS
SERIES E PREFERED STOCK FINANCING
DECEMBER 22, 2006

Name	Shares of Series E Preferred Stock	Purchase Price
VERSANT SIDE FUND I, L.P.	4,500	$ 18,000.00
VERSANT VENTURE CAPITAL I, L.P.	230,000	$ 920,000.00
LILLY BIO VENTURES, ELI LILLY AND COMPANY	89,750	$ 359,000.00
SIGHTLINE HEALTHCARE FUND III, L.P.	30,000	$ 120,000.00
BRUCE BURROWS	144,750	$ 579,000.00
LEHMAN BROTHERS HEALTHCARE VENTURE CAPITAL, L.P.	39,937	$ 159,748.00
LEHMAN BROTHERS OFFSHORE PARTNERSHIP ACCOUNT 2000/2001, L.P.	8,932	$ 35,728.00
LEHMAN BROTHERS P.A., LLC	76,440	$ 305,760.00
LEHMAN BROTHERS PARTNERSHIP ACCOUNT 2000/2001, L.P.	34,440	$ 137,760.00
TOTALS	4,284,749	$17,138,996.00

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT A
SCHEDULE OF PURCHASERS
SERIES E PREFERED STOCK FINANCING
MARCH 30, 2007

Name	Shares of Series E Preferred Stock	Purchase Price
JOHN M. HARLAND	5,000	$ 20,000.00
FERGUSON/EGAN FAMILY TRUST DATED 6/28/99	15,000	$ 60,000.00
HEALTH CARE ADMINISTRATION COMPANY	25,000	$ 100,000.00
THE CONDON FAMILY TRUST	12,500	$ 50,000.00
IN-Q-TEL, INC.	10,125	$ 40,500.00
IN-Q-TEL EMPLOYEE FUND, LLC	3,375	$ 13,500.00
THE V FOUNDATION FOR CANCER RESEARCH	6,250	$ 25,000.00
FREDRICK H. STERN	37,500	$ 150,000.00
ALFRED J. MANDEL	1,000	$ 4,000.00
PAULINE E. VAN YSENDOORN	2,500	$ 10,000.00
RHETT E. BROWN	12,500	$ 50,000.00
CLIPPERBAY & CO.	350,000	$1,400,000.00
TOTALS	**480,750**	**$1,923,000.00**

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

FLUIDIGM CORPORATION

AMENDMENT NO. 2 TO
SERIES E PREFERRED STOCK PURCHASE AGREEMENT

This Amendment No. 2 (the "**Amendment**") to that certain Series E Preferred Stock Purchase Agreement, dated as of June 13, 2006, as amended December 22, 2006, by and among Fluidigm Corporation, a California corporation (" **Fluidigm California** ") and the Purchasers named therein (the " **Purchase Agreement** "), is made and entered into effective as of October 10, 2007 (the " **Effective Date** ") by and among Fluidigm Corporation, a Delaware corporation (the " **Company** "), and the Purchasers named herein. Capitalized terms used in this Amendment that are not otherwise defined herein shall have the respective meanings assigned to them in the Purchase Agreement.

RECITALS

WHEREAS, Fluidigm California previously sold and issued an aggregate of 1,250,000 shares of Series E Preferred Stock (the " **Series E Preferred** ") pursuant to the terms of the Purchase Agreement at the Initial Closing held on June 13, 2006 and an additional 6,015,499 shares of Series E Preferred at Subsequent Closings held on December 22, 2006 and March 30, 2007;

WHEREAS, on July 18, 2007, Fluidigm California was merged with and into the Company, with the Company being the surviving corporation such that the Company succeeded to all of Fluidigm California's rights and obligations under the Purchase Agreement and all outstanding shares of Series E Preferred of Fluidigm California were exchanged on a one for one basis for shares of Series E Preferred of the Company;

WHEREAS, the Company and the Purchasers now desire to amend the terms of the Purchase Agreement to provide that the Company may sell and issue up to 7,375,000 additional shares of Series E Preferred (the " **Additional Shares** ") pursuant to the Purchase Agreement, at one or more additional Subsequent Closings, provided that any such additional Subsequent Closings shall take place no later than December 31, 2007.

WHEREAS, pursuant to Section 6.5 of the Purchase Agreement, the terms of the Purchase Agreement may be amended upon the written consent of the Company and the holder or holders of greater than fifty percent (50%) of the outstanding Shares or the Conversion Shares;

WHEREAS, the Purchasers who have signed below hold greater than fifty percent (50%) of the outstanding Shares purchased under the Purchase Agreement as of the Effective Date and consent to the changes as set forth in this Amendment;

WHEREAS, in connection with the execution of this Amendment, the Company is amending the Amended and Restated Certificate of Incorporation of the Company to increase the

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[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

number of authorized shares of capital stock of the Company to facilitate the sale of the Additional Shares.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto mutually agree as follows:

AGREEMENT

1. Amendment to Section 1.1. Section 1.1 (Authorization of the Shares) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"1.1 Authorization of the Shares. The Company will on or before the Closing (as defined below) authorize the sale and issuance pursuant to this Agreement of up to 17,956,252 shares (the " **Shares** ") of its Series E Preferred Stock (the " **Series E Preferred** "), having the rights, preferences and privileges as set forth in the Amended and Restated Certificate of Incorporation, as amended by Amendment No. 1 to Amended and Restated Certificate of Incorporation and Amendment No. 2 to Amended and Restated Certificate of Incorporation, as attached hereto as EXHIBITS B-1 AND B-2 , respectively (together for purposes of this Agreement, the " **Restated Certificate** ")."

2. Amendment to Section 1.2. Section 1.2 (Purchase and Sale of the Shares) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"1.2 Purchase and Sale of the Shares. Subject to the terms and conditions hereof and in reliance upon the representations, warranties and agreements contained herein, the Company will issue and sell to each Purchaser, severally and not jointly, and each Purchaser will purchase from the Company, severally and not jointly, at the applicable Closing, the number of Shares set forth opposite the Purchaser's name on the Schedule of Purchasers, at a purchase price of Four Dollars ($4.00) per Share. The Company shall be entitled to sell any unpurchased Shares to any Purchaser or to a person who is not a Purchaser and to amend the Schedule of Purchasers to include the information relating to such sales, and such purchasers shall be considered "Purchasers" and parties to this Agreement; provided that (i) such sales are made pursuant to this Agreement or an agreement identical to this one except for the Closing Date and exhibits, and (ii) such sales are completed on or prior to December 31, 2007. The Company's agreement with each Purchaser is a separate agreement, and the sale of the Shares to each Purchaser is a separate sale."

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

3. Amendment to Section 2. Section 2 (Representations and Warranties of the Company) of the Purchase Agreement is hereby amended to add the following sentence to the end of the paragraph which reads in its entirety as follows:

"At each Subsequent Closing, the Company shall provide an updated Schedule of Exceptions and EXHIBIT C shall be concurrently amended and restated for purposes of such Subsequent Closing."

4. Amendment to Section 2.4. Solely in connection with the sale of Additional Shares pursuant to this Amendment, Section 2.4 (Capitalization) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"The authorized capital stock of the Company consists, or immediately prior to the Closing will consist, of 85,232,144 shares of Common Stock (" **Common Stock** "), of which 9,760,848 shares are issued and outstanding immediately prior to the Closing and 57,961,085 shares of Preferred Stock (" **Preferred Stock** "), 2,727,273 of which are designated Series A Preferred Stock of which 2,727,273 are outstanding immediately prior to the Closing; 6,460,675 of which are designated Series B Preferred Stock of which 6,460,675 are outstanding immediately prior to the Closing; 16,854,624 of which are designated Series C Preferred Stock, 16,364,832 of which are issued and outstanding immediately prior to the Closing; and 13,962,261 of which are designated Series D Preferred Stock, 13,353,333 of which are issued and outstanding immediately prior to the Closing; and 17,956,252 of which are designated Series E Preferred Stock, 8,969,836 of which are issued and outstanding immediately prior to the Closing. All such issued and outstanding shares have been duly authorized and validly issued in compliance with applicable laws, and are fully paid and nonassessable.

The Company has reserved: (i) 17,956,252 shares of Series E Preferred for issuance hereunder and 17,956,252 shares of Common Stock for issuance upon conversion of such shares of Series E Preferred; (ii) 13,353,333 shares of Common Stock for issuance upon conversion of the outstanding shares of Series D Preferred; (iii) 408,928 shares of Series D Preferred for issuance upon exercise of outstanding warrants and 408,928 shares of Common Stock for issuance upon conversion of such Series D Preferred; (iv) 16,364,832 shares of Common Stock for issuance upon conversion of the outstanding shares of Series C Preferred Stock; (v) 289,792shares of Series C Preferred Stock for issuance upon exercise of outstanding warrants and 289,792 shares of Common Stock for issuance upon conversion of such Series C Preferred Stock; (vi) 6,460,675 shares of Common Stock for issuance upon conversion of the outstanding Series B Preferred Stock; (vii) 2,727,273 shares of Common Stock for issuance upon conversion of the outstanding Series A Preferred Stock; and (viii) an aggregate of 12,800,000 shares of Common Stock for issuance to

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

employees and consultants of the Company pursuant to the Company's 1999 Stock Option Plan, pursuant to which options to purchase 7,247,691 shares are granted and outstanding and 1,518,223 shares are available for future grant. As of the date hereof and after giving effect to the purchase of Shares hereunder, each share of each series of the Company's Preferred Stock is convertible into one share of the Company's Common Stock. Other than with respect to the shares reserved for issuance in this paragraph, or as set forth in the Ancillary Agreements (as defined below), there are no outstanding rights, options, warrants, conversion rights, preemptive rights, rights of first refusal or similar rights for the purchase or acquisition from the Company of any securities of the Company. There are no outstanding obligations of the Company to repurchase or redeem any of its securities."

5. Amendment to Section 2.16. Solely in connection with the sale of Additional Shares pursuant to this Amendment, Section 2.16 (Financial Statements) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"The Company has made available to each Purchaser its audited balance sheet dated as of December 31, 2004. The Company has also made available to each Purchaser unaudited balance sheets dated December 31, 2005 and December 31, 2006 and the unaudited statements of operations for the fiscal years then ended (collectively, the " **Financial Statements** "). The Financial Statements are complete and correct in all material respects and have been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods indicated. The Financial Statements accurately set out and describe the financial condition and operating results of the Company as of the date, and during the periods, indicated therein. Except as set forth in the Financial Statements, the Company has no material liabilities, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to December 31, 2006 and (ii) obligations under contracts and commitments incurred in the ordinary course of business and not required under generally accepted accounting principles to be reflected in the Financial Statements, which, in both cases, individually or in the aggregate are not material to the financial condition or operating results of the Company."

6. Deletion of Sections 6.9 and 6.11. Solely in connection with the sale of Additional Shares pursuant to this Amendment, the Purchase Agreement is hereby amended to delete Section 6.9 (Finder's Fee) and Section 6.11 (Waiver of Conflict), each in its entirety.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

7. Amendment to Section 6.10. Solely in connection with the sale of Additional Shares pursuant to this Amendment, Section 6.10 of the Purchase Agreement is hereby amended and restated in its entirety to read as follows:

"6.10 Expenses. The Company and each Purchaser shall bear its own expenses and legal fees incurred on its behalf with respect to this Agreement and the transactions contemplated hereby, *provided, however* , that if a Closing is effected, the Company shall reimburse the reasonable documented fees of one counsel for the Purchasers, such amount not to exceed $25,000, by wire transfer at such Closing."

8. Addition of Section 6.17. The Purchase Agreement is hereby amended to add the following Section 6.17 which reads in its entirety as follows:

"6.17 Reincorporation. Each Purchaser hereunder acknowledges that the Company completed a reincorporation into the State of Delaware on July 18, 2007 and each Purchaser hereby consents to the assignment of this Agreement to Fluidigm Corporation, a Delaware corporation effective as of July 18, 2007."

9. Restated Certificate. All references in the Purchase Agreement to the term "Restated Articles" are hereby deleted and replaced with the term "Restated Certificate."

10. Governing Law. This Amendment shall be governed in all respects by the laws of the State of California, without regard to any provisions thereof relating to conflicts of laws among different jurisdictions.

11. Purchase Agreement. Wherever necessary, all other terms of the Purchase Agreement are hereby amended to be consistent with the terms of this Amendment. Except as specifically set forth herein, the Purchase Agreement shall remain in full force and effect.

12. Counterparts; Facsimile. This Amendment may be executed in any number of counterparts, each of which shall be an original, and all of which together shall constitute one instrument. Executed signatures transmitted via facsimile will be accepted and considered duly executed.

13. Effect of Execution of Amendment by Certain Purchasers. This Amendment, when executed and delivered by the Company and a Purchaser purchasing shares of Series E Preferred at a Subsequent Closing held on or after the date hereof, shall also constitute and shall be deemed a counterpart signature page to the Purchase Agreement. Consequently, each undersigned Purchaser purchasing shares of Series E Preferred at a Subsequent Closing held on or after the date hereof acknowledges and agrees that he, she or it is bound by the terms and conditions contained in the Purchase Agreement, as amended by this Amendment, with respect to the purchase of such shares.

[*Remainder of page intentionally left blank*]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 2 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

COMPANY:

FLUIDIGM CORPORATION
a Delaware corporation

By: /s/ Gajus Worthington
Gajus Worthington,
President and Chief Executive Officer

[Signature Page to Amendment No. 2 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 2 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

FIDELITY CONTRAFUND:
FIDELITY ADVISOR NEW INSIGHTS FUND

By: /s/ Gary Ryan

Name: Gary Ryan

Title: Assistant Treasurer

FIDELITY CONTRAFUND: FIDELITY CONTRAFUND

By: /s/ Gary Ryan

Name: Gary Ryan

Title: Assistant Treasurer

VARIABLE INSURANCE PRODUCTS FUND II:
CONTRAFUND PORTFOLIO

By: /s/ Gary Ryan

Name: Gary Ryan

Title: Assistant Treasurer

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 2 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

LEERINK SWANN HOLDINGS, LLC

By: /s/ Jeffrey A. Leerink

Name: Jeffrey A. Leerink

Title: Chief Executive Officer

LEERINK SWANN HOLDINGS, LLC
CO-INVESTMENT FUND, LLC

By: /s/ Donald D. Notman, Jr.

Name: Donald D. Notman, Jr.

Title: Managing Director

[*Signature Page to Amendment No. 2 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement*]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 2 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

CROSS CREEK CAPITAL, L.P.

By: Cross Creek Capital GP, L.P.
Its Sole General Partner

By: Cross Creek Capital, LLC
Its Sole General Partner

By: Wasatch Advisors, Inc.
Its Sole Member

By: /s/ Karey Barker

Name: Karey Barker

Title: Vice President

CROSS CREEK CAPITAL EMPLOYEES' FUND, L.P.

By: Cross Creek Capital GP, L.P.
Its Sole General Partner

By: Cross Creek Capital, LLC
Its Sole General Partner

By: Wasatch Advisors, Inc.
Its Sole Member

By: /s/ Karey Barker

Name: Karey Barker

Title: Vice President

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 2 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

WASATCH FUNDS, INC.

By: Wasatch Advisors, Inc.
Its Sole Member

By: /s/ Dan Thurber

Name: Dan Thurber

Title: Vice President

[*Signature Page to Amendment No. 2 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement*]

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PURCHASERS:

SMALLCAP WORLD FUND, INC.

By: Capital Research and Management Company, its, investment adviser

By: /s/ Michael Downer

Name: Michael Downer

Title: _____

[*Signature Page to Amendment No. 2 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement*]

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PURCHASERS:

ALLIANCEBERNSTEIN VENTURE FUND I, L.P.

By: **AllianceBernstein ESG Venture Management, L.P., its general partner**

By: **AllianceBernstein Global Derivatives Corporation, its general partner**

By: /s/ James D. Kiggen

Name: James D. Kiggen

Title: Senior Vice President

[*Signature Page to Amendment No. 2 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement*]

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PURCHASERS:

VERSANT AFFILIATES FUND 1-A, L.P.

VERSANT AFFILIATES FUND1-B, L.P.

VERSANT SIDE FUND I, L.P.
VERSANT VENTURE CAPITAL I, L.P.

By: Versant Ventures I, LLC
its General Partner

By: /s/ Samuel D. Colella

Name: Samuel D. Colella

Title: Managing Director

[*Signature Page to Amendment No. 2 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement*]

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PURCHASERS:

LEHMAN BROTHERS HEALTHCARE VENTURE CAPITAL L.P.

By: Lehman Brothers HealthCare Venture Capital Associates L.P.,
its General Partner
By: LB I Group Inc., its General Partner

By: /s/ Steven Berkenfeld
Name: Steven Berkenfeld
Its: Senior Vice President

LEHMAN BROTHERS P.A. LLC

By: /s/ Steven Berkenfeld
Name: Steven Berkenfeld
Its: Senior Vice President

LEHMAN BROTHERS PARTNERSHIP ACCOUNT 2000/2001, L.P.

By: LB I Group Inc., its General Partner

By: /s/ Steven Berkenfeld
Name: Steven Berkenfeld
Its: Senior Vice President

LEHMAN BROTHERS OFFSHORE PARTNERSHIP ACCOUNT 2000/2001, L.P.

By: LB I Offshore Partners Group Ltd., its General Partner

By: /s/ Steven Berkenfeld
Name: Steven Berkenfeld
Its: Senior Vice President

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 2 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

EUCLIDSR PARTNERS, L.P.

By: EuclidSR Associates, L.P.
its General Partner

By: /s/ Elaine V. Jones

Name: Elaine V. Jones

Title: General Partner

EUCLIDSR BIOTECHNOLOGY PARTNERS, L.P.

By: EuclidSR Biotechnology Associates, L.P.
its General Partner

By: /s/ Elaine V. Jones

Name: Elaine V. Jones

Title: General Partner

[*Signature Page to Amendment No. 2 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement*]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 2 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

INTERWEST PARTNERS VII, L.P.

By: InterWest Management Partners VII, LLC
its General Partner

By: /s/ Michael Sweeney

Name: Michael Sweeney

Title: As agent for the general partner

INTERWEST INVESTORS VII, L.P.

By: InterWest Management Partners VII, LLC
its General Partner

By: /s/ Michael Sweeney

Name: Michael Sweeney

Title: As agent for the general partner

[*Signature Page to Amendment No. 2 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement*]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 2 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

LILLY BIOVENTURES, ELI LILLY & COMPANY

By: /s/ Darren J. Carroll

Name: Darren J. Carroll

Title: Executive Director

[*Signature Page to Amendment No. 2 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement*]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 2 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

[*Signature Page to Amendment No. 2 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement*]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 2 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

/s/ Bruce Burrows
BRUCE BURROWS

[*Signature Page to Amendment No. 2 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement*]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 2 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

BIOMEDICAL SCIENCES INVESTMENT FUND PTE LTD

By: /s/ Chu Swee Yeok

Name: Chu Swee Yeok

Title: Director

SINGAPORE BIO-INNOVATIONS PTE LTD

By: /s/ Sim Sze Kuan

Name: Sim Sze Kuan

Title: Director

[*Signature Page to Amendment No. 2 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement*]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 2 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

INVUS, L.P.

By: Invus Advisors LLC
General Partner of Invus LP

By: /s/ Aflalo Guimaraes

Name: Aflalo Guimaraes

Title: Managing Director

[*Signature Page to Amendment No. 2 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement*]

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EXHIBIT A
SCHEDULE OF PURCHASERS
SERIES E PREFERED STOCK FINANCING
OCTOBER 10, 2007

Name	Shares of Series E Preferred Stock		Purchase Price
FIDELITY CONTRAFUND:			
FIDELITY ADVISOR NEW INSIGHTS FUND	481,170	$	1,924,679.00
FIDELITY CONTRAFUND: FIDELITY CONTRAFUND	4,389,865	$	17,559,461.00
VARIABLE INSURANCE PRODUCTS FUND II:			
CONTRAFUND PORTFOLIO	1,378,965	$	5,515,860.00
LEERICK SWANN HOLDINGS, LLC	62,500	$	250,000.00
LEERICK SWANN CO-INVESTMENT FUND, LLC	78,750	$	315,000.00
TOTALS	**6,391,250**	**$**	**25,565,000.00**

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

FLUIDIGM CORPORATION

AMENDMENT NO. 3 TO
SERIES E PREFERRED STOCK PURCHASE AGREEMENT

This Amendment No. 3 (the "**Amendment**") to that certain Series E Preferred Stock Purchase Agreement, dated as of June 13, 2006, as amended December 22, 2006 and further amended October 10, 2007, by and among Fluidigm Corporation, a California corporation (" **Fluidigm California**") and the Purchasers named therein (the "**Purchase Agreement**"), is made and entered into effective as of October 26, 2007 (the "**Effective Date**") by and among Fluidigm Corporation, a Delaware corporation (the "**Company**"), and the Purchasers named herein. Capitalized terms used in this Amendment that are not otherwise defined herein shall have the respective meanings assigned to them in the Purchase Agreement.

RECITALS

WHEREAS, Fluidigm California previously sold and issued an aggregate of 1,250,000 shares of Series E Preferred Stock (the "**Series E Preferred**") pursuant to the terms of the Purchase Agreement at the Initial Closing held on June 13, 2006, an additional 4,284,749 shares of Series E Preferred at a Subsequent Closing held on December 22, 2006, an additional 480,750 shares of Series E Preferred at a Subsequent Closing held on March 30, 2007, and an additional 6,391,250 shares of Series E Preferred at a Subsequent Closing held on October 10, 2007;

WHEREAS, on July 18, 2007, Fluidigm California was merged with and into the Company, with the Company being the surviving corporation such that the Company succeeded to all of Fluidigm California's rights and obligations under the Purchase Agreement and all outstanding shares of Series E Preferred of Fluidigm California were exchanged on a one for one basis for shares of Series E Preferred of the Company;

WHEREAS, the Company and the Purchasers now desire to amend the terms of the Purchase Agreement to provide that the Company may sell and issue up to 2,153,695 additional shares of Series E Preferred (the "**Additional Shares**") pursuant to the Purchase Agreement, at one or more additional Subsequent Closings, provided that any such additional Subsequent Closings shall take place no later than December 31, 2007.

WHEREAS, pursuant to Section 6.5 of the Purchase Agreement, the terms of the Purchase Agreement may be amended upon the written consent of the Company and the holder or holders of greater than fifty percent (50%) of the outstanding Shares or the Conversion Shares;

WHEREAS, the Purchasers who have signed below hold greater than fifty percent (50%) of the outstanding Shares purchased under the Purchase Agreement as of the Effective Date and consent to the changes as set forth in this Amendment;

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

WHEREAS, in connection with the execution of this Amendment, the Company is amending the Amended and Restated Certificate of Incorporation of the Company to increase the number of authorized shares of capital stock of the Company to facilitate the sale of the Additional Shares.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto mutually agree as follows:

AGREEMENT

1. Amendment to Section 1.1. Section 1.1 (Authorization of the Shares) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"1.1 Authorization of the Shares. The Company will on or before the Closing (as defined below) authorize the sale and issuance pursuant to this Agreement of up to 18,498,531 shares (the "**Shares**") of its Series E Preferred Stock (the "**Series E Preferred**"), having the rights, preferences and privileges as set forth in the Amended and Restated Certificate of Incorporation, as amended by a Certificate of Amendment to Amended and Restated Certificate of Incorporation dated October 10, 2007 and a Certificate of Amendment to Amended and Restated Certificate of Incorporation dated October 26, 2007, as attached hereto as EXHIBITS B-1 AND B-2 , respectively (together for purposes of this Agreement, the **"Restated Certificate**")."

2. Amendment to Section 2.4. Solely in connection with the sale of Additional Shares pursuant to this Amendment, Section 2.4 (Capitalization) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"The authorized capital stock of the Company consists, or immediately prior to the Closing will consist, of 87,385,839 shares of Common Stock ("**Common Stock**"), of which 9,760,848 shares are issued and outstanding immediately prior to the Closing and 60,114,780 shares of Preferred Stock ("**Preferred Stock**"), 2,727,273 of which are designated Series A Preferred Stock of which 2,727,273 are outstanding immediately prior to the Closing; 6,460,675 of which are designated Series B Preferred Stock of which 6,460,675 are outstanding immediately prior to the Closing; 16,854,624 of which are designated Series C Preferred Stock, 16,364,832 of which are issued and outstanding immediately prior to the Closing; and 13,962,261 of which are designated Series D Preferred Stock, 13,353,333 of which are issued and outstanding immediately prior to the Closing; and 20,109,947 of which are designated Series E Preferred Stock, 15,361,086 of which are issued and outstanding immediately prior to the Closing. All such issued and outstanding shares have been duly

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

authorized and validly issued in compliance with applicable laws, and are fully paid and nonassessable.

The Company has reserved: (i) 18,498,531 shares of Series E Preferred for issuance hereunder and 20,109,947 shares of Common Stock for issuance upon conversion of all shares of Series E Preferred; (ii) 13,353,333 shares of Common Stock for issuance upon conversion of the outstanding shares of Series D Preferred; (iii) 408,928 shares of Series D Preferred for issuance upon exercise of outstanding warrants and 408,928 shares of Common Stock for issuance upon conversion of such Series D Preferred; (iv) 16,364,832 shares of Common Stock for issuance upon conversion of the outstanding shares of Series C Preferred Stock; (v) 289,792 shares of Series C Preferred Stock for issuance upon exercise of outstanding warrants and 289,792 shares of Common Stock for issuance upon conversion of such Series C Preferred Stock; (vi) 6,460,675 shares of Common Stock for issuance upon conversion of the outstanding Series B Preferred Stock; (vii) 2,727,273 shares of Common Stock for issuance upon conversion of the outstanding Series A Preferred Stock; and (viii) an aggregate of 12,800,000 shares of Common Stock for issuance to employees and consultants of the Company pursuant to the Company's 1999 Stock Option Plan, pursuant to which options to purchase 7,247,691 shares are granted and outstanding and 1,518,223 shares are available for future grant. As of the date hereof and after giving effect to the purchase of Shares hereunder, each share of each series of the Company's Preferred Stock is convertible into one share of the Company's Common Stock. Other than with respect to the shares reserved for issuance in this paragraph, or as set forth in the Ancillary Agreements (as defined below), there are no outstanding rights, options, warrants, conversion rights, preemptive rights, rights of first refusal or similar rights for the purchase or acquisition from the Company of any securities of the Company. There are no outstanding obligations of the Company to repurchase or redeem any of its securities."

3. Amendment to Section 2.16. Solely in connection with the sale of Additional Shares pursuant to this Amendment, Section 2.16 (Financial Statements) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"The Company has made available to each Purchaser its audited balance sheet dated as of December 31, 2004. The Company has also made available to each Purchaser unaudited balance sheets dated December 31, 2005 and December 31, 2006 and the unaudited statements of operations for the fiscal years then ended (collectively, the "**Financial Statements**"). The Financial Statements are complete and correct in all material respects and have been prepared in accordance with generally

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

accepted accounting principles applied on a consistent basis throughout the periods indicated. The Financial Statements accurately set out and describe the financial condition and operating results of the Company as of the date, and during the periods, indicated therein. Except as set forth in the Financial Statements, the Company has no material liabilities, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to December 31, 2006 and (ii) obligations under contracts and commitments incurred in the ordinary course of business and not required under generally accepted accounting principles to be reflected in the Financial Statements, which, in both cases, individually or in the aggregate are not material to the financial condition or operating results of the Company."

4. Governing Law. This Amendment shall be governed in all respects by the laws of the State of California, without regard to any provisions thereof relating to conflicts of laws among different jurisdictions.

5. Purchase Agreement. Wherever necessary, all other terms of the Purchase Agreement are hereby amended to be consistent with the terms of this Amendment. Except as specifically set forth herein, the Purchase Agreement shall remain in full force and effect.

6. Counterparts; Facsimile. This Amendment may be executed in any number of counterparts, each of which shall be an original, and all of which together shall constitute one instrument. Executed signatures transmitted via facsimile will be accepted and considered duly executed.

7. Effect of Execution of Amendment by Certain Purchasers. This Amendment, when executed and delivered by the Company and a Purchaser purchasing shares of Series E Preferred at a Subsequent Closing held on or after the date hereof, shall also constitute and shall be deemed a counterpart signature page to the Purchase Agreement. Consequently, each undersigned Purchaser purchasing shares of Series E Preferred at a Subsequent Closing held on or after the date hereof acknowledges and agrees that he, she or it is bound by the terms and conditions contained in the Purchase Agreement, as amended by this Amendment, with respect to the purchase of such shares.

[*Remainder of page intentionally left blank*]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 3 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

COMPANY:

FLUIDIGM CORPORATION
a Delaware corporation

By: /s/ Gajus Worthington
Gajus Worthington,
President and Chief Executive Officer

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 3 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

FIDELITY CONTRAFUND:
FIDELITY ADVISOR NEW INSIGHTS FUND

By: /s/ Peter Lydecker

Name: Peter Lydecker

Title: Assistant Treasurer

FIDELITY CONTRAFUND: FIDELITY CONTRAFUND

By: /s/ Peter Lydecker

Name: Peter Lydecker

Title: Assistant Treasurer

VARIABLE INSURANCE PRODUCTS FUND II:
CONTRAFUND PORTFOLIO

By: /s/ Peter Lydecker

Name: Peter Lydecker

Title: Assistant Treasurer

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 3 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

LEERINK SWANN HOLDINGS, LLC

By: /s/ Jeffrey Leerink

Name: Jeffrey Leerink

Title: Chairman

LEERINK SWANN HOLDINGS, LLC
CO-INVESTMENT FUND, LLC

By: /s/ Donald D. Notman, Jr.

Name: Donald D. Notman, Jr.

Title: Managing Director

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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PURCHASERS:

CROSS CREEK CAPITAL, L.P.

By: Cross Creek Capital GP, L.P.
Its Sole General Partner

By: Cross Creek Capital, LLC
Its Sole General Partner

By: Wasatch Advisors, Inc.
Its Sole Member

By: /s/ Karey Barker

Name: Karey Barker

Title: Vice President

CROSS CREEK CAPITAL EMPLOYEES' FUND, L.P.

By: Cross Creek Capital GP, L.P.
Its Sole General Partner

By: Cross Creek Capital, LLC
Its Sole General Partner

By: Wasatch Advisors, Inc.
Its Sole Member

By: /s/ Karey Barker

Name: Karey Barker

Title: Vice President

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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PURCHASERS:

WASATCH FUNDS, INC.

By: Wasatch Advisors, Inc.
Its Sole Member

By: /s/ Venice Edwards

Name: Venice Edwards

Title: Secretary

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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PURCHASERS:

SMALLCAP WORLD FUND, INC.

By: Capital Research and Management Company, its, investment adviser

By: /s/ Paul Haaga

Name: Paul Haaga

Title: _____

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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PURCHASERS:

ALLIANCEBERNSTEIN VENTURE FUND I, L.P.

By: **AllianceBernstein ESG Venture Management, L.P., its general partner**

By: **AllianceBernstein Global Derivatives Corporation, its general partner**

By: /s/ James D. Kiggen

Name: James D. Kiggen

Title: Senior Vice President

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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PURCHASERS:

VERSANT AFFILIATES FUND 1-A, L.P.
VERSANT AFFILIATES FUND1-B, L.P.
VERSANT SIDE FUND I, L.P.
VERSANT VENTURE CAPITAL I, L.P.
By: Versant Ventures I, LLC
its General Partner

By: /s/ Samuel D. Colella

Name: Samuel D. Colella

Title: Managing Director

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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PURCHASERS:

LEHMAN BROTHERS HEALTHCARE VENTURE CAPITAL L.P.

By: Lehman Brothers HealthCare Venture Capital Associates L.P.,
its General Partner
By: LB I Group Inc., its General Partner

By: /s/ Ashvin Rao
Name: Ashvin Rao
Its: Vice President

LEHMAN BROTHERS P.A. LLC

By: /s/ Deborah Nordell
Name: Deborah Nordell
Its: Vice President

LEHMAN BROTHERS PARTNERSHIP ACCOUNT 2000/2001, L.P.

By: LB I Group Inc., its General Partner

By: /s/ Ashvin Rao
Name: Ashvin Rao
Its: Vice President

LEHMAN BROTHERS OFFSHORE PARTNERSHIP ACCOUNT 2000/2001, L.P.

By: LB I Offshore Partners Group Ltd., its General Partner

By: /s/ Ashvin Rao
Name: Ashvin Rao
Its: Vice President

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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PURCHASERS:

EUCLIDSR PARTNERS, L.P.

By: EuclidSR Associates, L.P.
its General Partner

By: /s/ Elaine V. Jones

Name: Elaine V. Jones

Title: General Partner

EUCLIDSR BIOTECHNOLOGY PARTNERS, L.P.

By: EuclidSR Biotechnology Associates, L.P.
its General Partner

By: /s/ Elaine V. Jones

Name: Elaine V. Jones

Title: General Partner

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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PURCHASERS:

INTERWEST PARTNERS VII, L.P.

By: InterWest Management Partners VII, LLC

its General Partner

By: /s/ Michael Sweeney

Name: Michael Sweeney

Title: As agent for the general partner

INTERWEST INVESTORS VII, L.P.

By: InterWest Management Partners VII, LLC

its General Partner

By: /s/ Michael Sweeney

Name: Michael Sweeney

Title: As agent for the general partner

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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PURCHASERS:

LILLY BIOVENTURES, ELI LILLY & COMPANY

By: /s/ Darren J. Carroll

Name: Darren J. Carroll

Title: Executive Director

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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PURCHASERS:

ALLOY VENTURES 2005, L.P.

By: Alloy Ventures 2005, LLC
its General Partner

By: /s/ Tony DiBona

Name: Toni DiBona

Title: Managing Member of Alloy Ventures 2005 LLC

ALLOY VENTURES 2002, L.P.
ALLOY PARTNERS 2002, L.P.

By: Alloy Ventures 2002, LLC
its General Partner

By: /s/ Tony DiBona

Name: Tony DiBona

Title: Managing Member of Alloy Ventures 2002, LLC, the general partner of Alloy Partners 2002, L.P. and Alloy Ventures 2002, L.P.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 3 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

/s/ Bruce Burrows
BRUCE BURROWS

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 3 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

SIGHTLINE HEALTHCARE FUND III, L.P.

By: /s/ Maureen Harder

Name: Maureen Harder

Title: Managing Director

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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PURCHASERS:

BIOMEDICAL SCIENCES INVESTMENT FUND PTE LTD

By: /s/ Chu Swee Yeok

Name: Chu Swee Yeok

Title: Director

SINGAPORE BIO-INNOVATIONS PTE LTD

By: /s/ Sim Sze Kuan

Name: Sim Sze Kuan

Title: Director

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 3 to Series E Preferred Stock Purchase Agreement as of the Effective Date.

PURCHASERS:

INVUS, L.P.

By: Invus Advisors LLC
General Partner of Invus LP

By: /s/ Aflalo Guimaraes

Name: Aflalo Guimaraes

Title: Managing Director

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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EXHIBIT A
SCHEDULE OF PURCHASERS
SERIES E PREFERRED STOCK FINANCING – SECOND EXTENDED CLOSING
OCTOBER 26, 2007

Name	Shares of Series E Preferred Stock	Purchase Price
CLIPPERBAY & CO.		
SMALLCAP World Fund, Inc.	2,153,695	$ 8,614,780.00
TOTALS	**2,153,695**	**$ 8,614,780.00**

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 3 to Series E Preferred Stock Purchase Agreement as of the 31st day of December, 2007.

COMPANY:

FLUIDIGM CORPORATION
a Delaware corporation

By: /s/ Gajus Worthington
Gajus Worthington,

President and Chief Executive Officer

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Amendment No. 3 to Series E Preferred Stock Purchase Agreement as of the 31st day of December, 2007.

PURCHASER:

/s/ Bruce Burrows
Bruce Burrows

[Signature Page to Amendment No. 3 to Fluidigm Corporation Series E Preferred Stock Purchase Agreement]

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EXHIBIT A
SCHEDULE OF PURCHASER
SERIES E PREFERRED STOCK FINANCING – THIRD EXTENDED CLOSING
DECEMBER 31, 2007

Name	Shares of Series E Preferred Stock	Purchase Price
BRUCE BURROWS	250,000	$1,000,000.00
TOTALS	**250,000**	**$1,000,000.00**

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT B

FORM OF AMENDED AND RESTATED ARTICLES OF INCORPORATION

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Confidential Treatment Requested by Fluidigm Corporation

FORM OF AMENDED AND RESTATED

ARTICLES OF INCORPORATION OF

FLUIDIGM CORPORATION

Gajus V. Worthington and William Smith each certify that:

1. They are the President and Secretary, respectively, of Fluidigm Corporation, a California corporation (the "**Corporation**").

2. The Amended and Restated Articles of Incorporation of the Corporation are hereby amended and restated in full to read as set forth in EXHIBIT A attached hereto, which is incorporated by reference as if fully set forth herein.

3. Said Amended and Restated Articles of Incorporation have been duly approved by the Corporation's Board of Directors.

4. Said Amended and Restated Articles of Incorporation have been duly approved by the required vote of shareholders in accordance with Sections 902 and 903 of the Corporations Code. The total number of outstanding shares of the corporation is 9,274,356 shares of Common Stock, 2,727,273 shares of Series A Preferred Stock, 6,460,675 shares of Series B Preferred Stock, 16,364,832 shares of Series C Preferred Stock, and 11,714,048 shares of Series D Preferred Stock. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50% of the outstanding Common Stock, voting as a single class; more than 50% of the outstanding Series A Preferred Stock, voting as a single class; at least 66 2/3 % of the outstanding Series B Preferred Stock, voting as a single class; at least 66 2/3 % of the outstanding Series C Preferred Stock, voting as a single class; at least 60% of the outstanding Series D Preferred Stock, voting as a single class; more than 66 2/3 % of the outstanding Preferred Stock, voting as a single class; and more than 50% of the outstanding Common Stock and Preferred Stock, voting together as a single class.

I further declare under penalty of perjury that the matters set forth in the foregoing certificate are true and correct of my own knowledge.

Executed at Palo Alto, California, this __ day of June 2006.

Gajus V. Worthington
President

William M. Smith
Secretary

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit A

FORM OF AMENDED AND RESTATED

ARTICLES OF INCORPORATION OF

FLUIDIGM CORPORATION

ARTICLE I

The name of the corporation is Fluidigm Corporation.

ARTICLE II

The purpose of this corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of California other than the banking business, the trust company business or the practice of a profession permitted to be incorporated under the California Corporations Code.

ARTICLE III

The total number of shares of stock that the corporation shall have authority to issue is One Hundred Twenty-Nine Million Five Hundred Forty-Five Thousand Ninety-Two (129,545,092) consisting of Seventy-Seven Million Eight Hundred Fifty-Seven Thousand One Hundred Forty-Four (77,857,144) shares of Common Stock, $0.001 par value per share, and Fifty-One Million Six Hundred Eighty-Seven Thousand Nine Hundred Forty-Eight (51,687,948) shares of Preferred Stock, $0.001 par value per share. The first series of Preferred Stock shall be designated “Series A Preferred Stock” and shall consist of Two Million Seven Hundred Twenty—Seven Thousand Two Hundred Seventy—Three (2,727,273) shares. The second series of Preferred Stock shall be designated “Series B Preferred Stock” and shall consist of Six Million Four Hundred Sixty Thousand Six Hundred Seventy-Five (6,460,675) shares. The third series of Preferred Stock shall be designated “Series C Preferred Stock” and shall consist of Seventeen Million (17,000,000) shares. The fourth series of Preferred Stock shall be designated “Series D Preferred Stock” and shall consist of Fifteen Million Five Hundred Thousand (15,500,000) shares. The fifth series of Preferred Stock shall be designated “Series E Preferred Stock” and shall consist of Ten Million (10,000,000) shares.

ARTICLE IV

The terms and provisions of the Common Stock and Preferred Stock are as follows:

1. Definitions. For purposes of this Article IV, the following definitions shall apply:

(a) “Conversion Price” shall mean $1.10 per share for the Series A Preferred Stock, $1.78 per share for the Series B Preferred Stock, $2.58 per share for the Series C Preferred

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Stock, $2.80 per share for the Series D Preferred Stock, and $4.00 for the Series E Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(b) "Convertible Securities" shall mean any evidences of indebtedness, shares or other securities (other than shares of Common Stock) convertible into or exchangeable for Common Stock.

(c) "Corporation" shall mean Fluidigm Corporation.

(d) "Dividend Rate" shall mean an annual rate of $0.11 per share for the Series A Preferred Stock, an annual rate of $0.18 for the Series B Preferred Stock, an annual rate of $0.26 per share for the Series C Preferred Stock, an annual rate of $0.30 per share for the Series D Preferred Stock, and an annual rate of $0.43 per share for the Series E Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(e) "Liquidation Preference" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 per share for the Series B Preferred Stock, $2.58 per share for the Series C Preferred Stock, $2.80 per share for the Series D Preferred Stock, and $4.00 per share for the Series E Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(f) "Options" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(g) "Original Issue Price" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 for the Series B Preferred Stock, $2.58 per share for the Series C Preferred Stock, $2.80 per share for the Series D Preferred Stock, and $4.00 per share for the Series E Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(h) "Preferred Stock" shall mean the Series A Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock, the Series D Preferred Stock, and the Series E Preferred Stock.

2. Dividends.

(a) Series D and Series E Preferred Stock. The holders of outstanding shares of Series D Preferred Stock and the holders of outstanding shares of Series E Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rates specified for such shares of Preferred Stock, payable in preference and priority to any declaration or payment of any distribution on Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock or Common Stock (collectively, the "**Junior Stock**") of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Junior Stock during any fiscal year of the Corporation, other than dividends on the Common Stock payable solely in Common Stock, until all dividends at the applicable Dividend Rate on the Series E Preferred Stock and Series D Preferred Stock have been declared and paid or set apart for payment to the holders of Series E Preferred Stock and the holders of Series D Preferred Stock. Payment of any dividends to the holders of the Series E Preferred Stock and the Series D Preferred Stock shall be on a pro rata , pari passu basis in proportion to the Dividend Rates for the Series E Preferred Stock and Series D Preferred Stock, as applicable.

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The right to receive dividends on shares of Series E Preferred Stock and Series D Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series E Preferred Stock and Series D Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(b) Series C Preferred Stock. The holders of outstanding shares of Series C Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Series A Preferred Stock, Series B Preferred Stock or Common Stock of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Series A Preferred Stock, Series B Preferred Stock or Common Stock during any fiscal year of the Corporation, other than dividends on the Common Stock payable solely in Common Stock, until all dividends at the applicable Dividend Rate on the Series C Preferred Stock have been declared and paid or set apart for payment to the holders of Series C Preferred Stock. The right to receive dividends on shares of Series C Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series C Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(c) Series A Preferred Stock and Series B Preferred Stock. The holders of outstanding shares of Series A Preferred Stock and the holders of outstanding shares of Series B Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Common Stock of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Common Stock, other than dividends payable solely in Common Stock, until all dividends at the applicable Dividend Rate on the Preferred Stock have been declared and paid or set apart for payment to the Preferred Stock holders. Payment of any dividends to the holders of the Series A Preferred Stock and Series B Preferred Stock shall be on a pro rata , pari passu basis in proportion to the Dividend Rates for the Series A Preferred Stock and Series B Preferred Stock, as applicable. The right to receive dividends on shares of Series A Preferred Stock and Series B Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series A Preferred Stock or Series B Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(d) Distribution. For purposes of this Section 2, unless the context otherwise requires, a "**distribution**" shall mean the transfer of cash or other property without consideration whether by way of dividend or otherwise, payable other than in Common Stock, or the purchase or redemption of shares of the Corporation other than (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors; and (ii) repurchase of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors; and (iii) any other repurchase or redemption of capital stock of the corporation unanimously approved by the Board of Directors and approved by the holders of the majority of the

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Common Stock and the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock, voting as separate classes.

(e) Common Stock. Dividends may be paid on the Common Stock as and when declared by the Board of Directors, subject to the prior dividend rights of the Preferred Stock and Section 6 below.

(f) Non-Cash Distributions. Whenever a distribution provided for in this Section 2 shall be payable in property other than cash, the value of such distribution shall be deemed to be the fair market value of such property as determined in good faith by the Board of Directors.

(g) Consent to Certain Repurchases. As authorized by Section 402.5(c) of the California Corporations Code, Sections 502 and 503 of the California Corporations Code shall not apply with respect to payments made by the Corporation in connection with (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors, and (ii) repurchase of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors, and (iii) any other repurchase or redemption of Common Stock unanimously approved by the Board of Directors and approved by the holders of more than two-thirds (2/3) of the outstanding shares of Preferred Stock voting together as a single class.

3. Liquidation Rights.

In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, distribution of the assets of the Corporation legally available for distribution to the Corporation's shareholders shall be made in the following manner:

(a) Series E Liquidation Preference. The holders of the Series E Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock, or the Series D Preferred Stock, by reason of their ownership of such stock, an amount per share for each share of Series E Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series E Preferred Stock. If the assets of the Corporation legally available for distribution to the holders of the Series E Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(a), then the entire assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series E Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(a).

(b) Series D Liquidation Preference. After payment to the holders of Series E Preferred Stock of the full amounts specified in Section 3(a) above, the holders of the Series D Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the

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assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock, the Series B Preferred Stock or the Series C Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series D Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series D Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of Series D Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(b), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series D Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(b).

(c) Series C Liquidation Preference. After payment to the holders of Series E Preferred Stock and to the holders of Series D Preferred Stock of the full amounts specified in Sections 3(a) and 3(b) above, the holders of the Series C Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock or the Series B Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series C Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series C Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series C Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(c), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series C Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(c).

(d) Series B Liquidation Preference. After the payment to the holders of Series E Preferred Stock, the holders of Series D Preferred Stock, and the holders of Series C Preferred Stock of the full amounts specified in Sections 3(a), 3(b), and 3(c) above, the holders of the Series B Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock or Series A Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series B Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series B Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series B Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(d), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series B Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(d).

(e) Series A Liquidation Preference. After the payment to the holders of Series E Preferred Stock, the holders of Series D Preferred Stock, the holders of Series C Preferred Stock, and the holders of Series B Preferred Stock of the full amounts specified in Sections 3(a), 3(b), 3(c) and 3(d) above, the holders of the Series A Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock by reason of their ownership of such stock, an amount per share for each share of

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Series A Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series A Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series A Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(e), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series A Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(e).

(f) Remaining Assets. After the payment to the holders of Preferred Stock of the full amounts specified in Sections 3(a), 3(b), 3(c), 3(d) and 3(e) above, the entire remaining assets of the Corporation legally available for distribution shall be distributed pro rata to holders of the Common Stock of the Corporation in proportion to the number of shares of Common Stock held by them.

(g) Shares Not Treated as Both Preferred Stock and Common Stock in Any Distribution. Shares of Preferred Stock shall not be entitled to be converted into shares of Common Stock in order to participate in any distribution, or series of distributions, as shares of Common Stock, without first foregoing participation in the distribution, or series of distributions, as shares of Preferred Stock.

(h) Reorganization. For purposes of this Section 3, a liquidation, dissolution or winding up of the Corporation shall be deemed to be occasioned by, or to include, (i) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any merger effected exclusively for the purpose of changing the domicile of the Corporation) other than a transaction or series of transactions in which the holders of the voting securities of the Corporation outstanding immediately prior to such transaction or series of transactions continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Corporation held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Corporation or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, transfer, lease or other conveyance of all or substantially all of the assets of the Corporation.

(i) Valuation of Non-Cash Consideration. If any assets of the Corporation distributed to shareholders in connection with any liquidation, dissolution, or winding up of the Corporation are other than cash, then the value of such assets shall be their fair market value as determined in good faith by the Board of Directors, except that any securities to be distributed to shareholders in a liquidation, dissolution, or winding up of the Corporation shall be valued as follows:

(i) If the securities are then traded on a national securities exchange or the Nasdaq Stock Market System (or a similar national quotation system), then the value of the securities shall be deemed to be to the average of the closing prices of the securities on such exchange or system over the ten (10) trading day period ending five (5) trading days prior to the distribution;

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(ii) if the securities are actively traded over-the-counter, then the value of the securities shall be deemed to be the average of the closing bid prices of the securities over the ten (10) trading day period ending five (5) trading days prior to the distribution; or

(iii) if there is no active public market for the securities, then the value of the securities shall be deemed to be the fair market value thereof as determined in good faith by the Board of Directors which determination shall include consideration of the illiquidity of the securities.

In the event of a merger or other acquisition of the Corporation by another entity, the distribution date shall be deemed to the date such transaction closes.

For the purposes of this Section 3(i), "**trading day**" shall mean any day on which the exchange or system on which the securities to be distributed are traded is open, and "closing prices" or "closing bid prices" shall be deemed to be: (i) for securities traded primarily on the New York Stock Exchange, the American Stock Exchange or Nasdaq, the last reported trade price or sale price, as the case may be, at 4:00 p.m., New York time, on that day and (ii) for securities listed or traded on other exchanges, markets and systems, the market price as of the end of the "regular hours" trading period that is generally accepted as such for such exchange, market or system. If, after the date hereof, the benchmark times generally accepted in the securities industry for determining the market price of a stock as of a given trading day shall change from those set forth above, the fair market value shall be determined as of such other generally accepted benchmark times.

4. Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the "**Conversion Rights**"):

(a) Right to Convert. Subject to Section 4(c), each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share at the office of the Corporation or any transfer agent for the Preferred Stock, into that number of fully-paid, nonassessable shares of Common Stock determined by dividing the Original Issue Price for the relevant series by the Conversion Price for such series. (The number of shares of Common Stock into which each share of Preferred Stock of a series may be converted is hereinafter referred to as the "**Conversion Rate**" for each such series.) Upon any decrease or increase in the Conversion Price for any series of Preferred Stock, as described in this Section 4, the Conversion Rate for such series shall be appropriately increased or decreased.

(b) Automatic Conversion. Each share of Preferred Stock shall automatically be converted into fully-paid, non-assessable shares of Common Stock at the then effective Conversion Rate for such share (i) immediately prior to the closing of a firm commitment underwritten initial public offering on Form S-1 (or successor form) filed under the Securities Act of 1933, as amended (the "**Securities Act**"), covering the offer and sale of the Corporation's Common Stock, provided that the offering price per share is not less than $5.69 (as adjusted for subdivisions and combinations of the Common Stock and changes in the Common Stock as set forth in Sections 4(e) and 4(g)) and the aggregate gross proceeds to the Corporation are not less than $25,000,000, or (ii) upon the receipt by the Corporation of a written consent or request for such conversion from the holders of two-thirds of the shares of Preferred Stock then outstanding, or, if later, the effective date for

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conversion specified in such requests (each of the events referred to in (i) and (ii) being hereinafter referred to as an "**Automatic Conversion Event**").

(c) Mechanics of Conversion. No fractional shares of Common Stock shall be issued upon conversion of Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the then fair market value of a share of Common Stock as determined by the Board of Directors. For such purpose, all shares of Preferred Stock held by each holder of Preferred Stock shall be aggregated, and any resulting fractional share of Common Stock shall be paid in cash. Before any holder of Preferred Stock shall be entitled to convert the same into full shares of Common Stock, and to receive certificates therefor, he shall either surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or of any transfer agent for the Preferred Stock, or notify the Corporation or its transfer agent that such certificate or certificates have been lost, stolen or destroyed and execute an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificate or certificates, and shall give written notice to the Corporation at such office that he elects to convert the same; provided , however , that on the date of an Automatic Conversion Event, the outstanding shares of Preferred Stock shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent; provided further , however, that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such Automatic Conversion Event unless either the certificates evidencing such shares of Preferred Stock are delivered to the Corporation or its transfer agent as provided above, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. On the date of the occurrence of an Automatic Conversion Event, each holder of record of shares of Preferred Stock shall be deemed to be the holder of record of the Common Stock issuable upon such conversion, notwithstanding that the certificates representing such shares of Preferred Stock shall not have been surrendered at the office of the Corporation, that notice from the Corporation shall not have been received by any holder of record of shares of Preferred Stock, or that the certificates evidencing such shares of Common Stock shall not then be actually delivered to such holder.

The Corporation shall, as soon as practicable after such delivery, or after such agreement and indemnification, issue and deliver at such office to such holder of Preferred Stock, a certificate or certificates for the number of shares of Common Stock to which he shall be entitled as aforesaid and a check payable to the holder in the amount of any cash amounts payable as the result of a conversion into fractional shares of Common Stock, plus any declared and unpaid dividends on the converted Preferred Stock. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date; provided , however , that if the conversion is in connection with an underwritten offer of securities registered pursuant to the Securities Act the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing of the sale of securities pursuant to such offering, in which event the person(s) entitled to receive the

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Common Stock issuable upon such conversion of the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of the sale of such securities.

(d) Adjustments to Conversion Price for Diluting Issues.

(i) Special Definition. For purposes of this Section 4(d), "**Additional Shares of Common**" shall mean all shares of Common Stock issued (or, pursuant to Section 4(d)(iii), deemed to be issued) by the Corporation after the filing of these Articles of Incorporation, other than:

(1) [omitted];

(2) shares of Common Stock issued or issuable to officers, directors and employees of, or consultants and other service providers to, the Corporation pursuant to stock grants, option plans, purchase plans or other employee stock incentive programs or arrangements approved by the Board of Directors or upon exercise of options or warrants granted to such parties pursuant to any such plan, program or arrangement;

(3) shares of Common Stock issued upon the exercise or conversion of Options or Convertible Securities outstanding as of the date of the filing of these Articles of Incorporation;

(4) shares of Common Stock issued or issuable as a dividend or distribution on Preferred Stock or pursuant to any event for which adjustment is made pursuant to Section 4(e), 4(f) or 4(g) hereof;

(5) shares of Common Stock issued in a registered public offering under the Securities Act pursuant to which all outstanding shares of Preferred Stock are automatically converted into Common Stock pursuant to an Automatic Conversion Event;

(6) shares of Common Stock issued or issuable pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided, that such issuances are unanimously approved by the Board of Directors;

(7) shares of Common Stock issued or issuable to banks, equipment lessors or other financial institutions pursuant to a commercial leasing or debt financing transaction approved by the Board of Directors;

(8) shares of Common Stock issued or issuable in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements, or strategic partnerships or relationships, if the issuance is approved by the Board of Directors; and

(9) shares of Common Stock issued or issuable upon conversion of up to $18 million in aggregate principal amount (plus interest) of convertible promissory notes originally issued or issuable to Biomedical Sciences Investment Fund Pte Ltd. or its affiliates ("BMSIF") and upon conversion of up to $3 million in aggregate principal amount (plus interest) of convertible promissory notes originally issued or issuable to Invus, L.P. or its affiliates, *provided*

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that with respect to any shares of Common Stock issued or issuable upon conversion of convertible promissory notes issued or issuable to BMSIF after the filing of these Articles of Incorporation with an aggregate principal amount in excess of $3.0 million, such shares of Common Stock shall only be excluded from the definition of Additional Shares of Common pursuant to this section if and to the extent the applicable conversion price for such shares equals or exceeds $3.60 (as adjusted for stock splits, subdivisions, combinations or stock dividends).

(ii) No Adjustment of Conversion Price. No adjustment in the Conversion Price of a particular series of Preferred Stock shall be made in respect of the issuance of Additional Shares of Common unless the consideration per share (as determined pursuant to Section 4(d)(vii)) for an Additional Share of Common issued or deemed to be issued by the Corporation is less than the Conversion Price in effect on the date of, and immediately prior to such issue, for such series of Preferred Stock.

(iii) Deemed Issue of Additional Shares of Common. In the event the Corporation at any time or from time to time after the date of the filing of these Articles of Incorporation shall issue any Options or Convertible Securities or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein for a subsequent adjustment of such number) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible Securities, the conversion or exchange of such Convertible Securities or, in the case of Options for Convertible Securities, the exercise of such Options and the conversion or exchange of the underlying securities, shall be deemed to have been issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that in any such case in which shares are deemed to be issued:

(1) no further adjustment in the Conversion Price of the Preferred Stock shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock in connection with the exercise of such Options or conversion or exchange of such Convertible Securities pursuant to the terms of such Options or Convertible Securities;

(2) if no adjustment in the Conversion Price of the Preferred Stock was made upon the original issue of (or upon the occurrence of a record date with respect to) such Options or Convertible Securities and such Options or Convertible Securities are revised to provide, or by their terms provide, with the passage of time or otherwise, for any increase or decrease in the consideration payable to the Corporation, or any increase or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, then such Options or Convertible Securities as so revised (and the Additional Shares of Common subject thereto) shall be deemed to have been issued effective upon such increase or decrease becoming effective;

(3) if such Options or Convertible Securities are revised to provide, or by their terms provide, with the passage of time or otherwise, for any increase or decrease in the consideration payable to the Corporation, or any increase or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price of the Preferred Stock computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon,

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shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities;

(4) no readjustment pursuant to clause (3) above shall have the effect of increasing the Conversion Price of the Preferred Stock to an amount which exceeds the lower of (i) the Conversion Price of the Preferred Stock on the original adjustment date, or (ii) the Conversion Price of the Preferred Stock that would have resulted from any issuance of Additional Shares of Common between the original adjustment date and such readjustment date;

(5) upon the expiration of any such Options or any rights of conversion or exchange under such Convertible Securities which shall not have been exercised, the Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto) and any subsequent adjustments based thereon shall, upon such expiration, be recomputed as if:

(A) in the case of Convertible Securities or Options for Common Stock, the only Additional Shares of Common issued were the shares of Common Stock, if any, actually issued upon the exercise of such Options or the conversion or exchange of such Convertible Securities and the consideration received therefor was the consideration actually received by the Corporation for the issue of such exercised Options plus the consideration actually received by the Corporation upon such exercise or for the issue of all such Convertible Securities which were actually converted or exchanged, plus the additional consideration, if any, actually received by the Corporation upon such conversion or exchange, and

(B) in the case of Options for Convertible Securities, only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such Options, and the consideration received by the Corporation for the Additional Shares of Common deemed to have been then issued was the consideration actually received by the Corporation for the issue of such exercised Options, plus the consideration deemed to have been received by the Corporation (determined pursuant to Section 4(d)(vii)) upon the issue of the Convertible Securities with respect to which such Options were actually exercised; and

(6) if such record date shall have been fixed and such Options or Convertible Securities are not issued on the date fixed therefor, the adjustment previously made in the Conversion Price which became effective on such record date shall be canceled as of the close of business on such record date, and thereafter the Conversion Price shall be adjusted pursuant to this Section 4(d)(iii) as of the actual date of their issuance.

(iv) Adjustment of Conversion Price of Series E Preferred Stock Upon Issuance of Additional Shares of Common.

(1) For so long as the Conversion Price of the Series E Preferred Stock is greater than $2.58 (as adjusted for subdivisions and combinations of the Common Stock and changes in the Common Stock as set forth in Sections 4(e) and 4(g)) (the "**Series D/E Ratchet Amount**"), in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) for a consideration

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per share less than the applicable Conversion Price of the Series E Preferred Stock in effect on the date of and immediately prior to such issue, but for a consideration per share equal to or greater than the Series D/E Ratchet Amount, then the Conversion Price of the Series E Preferred Stock shall be reduced concurrently with such issue to a price (calculated to the nearest cent) equal to the per share price of the Additional Shares of Common.

(2) In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) without consideration or for a consideration per share less than the Series D/E Ratchet Amount, then the Conversion Price of the Series E Preferred Stock immediately prior to such issue shall be deemed to be equal to the Series D/E Ratchet Amount (the "**Series E Adjusted Conversion Price**"), and such Series E Adjusted Conversion Price shall be further reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Series E Adjusted Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Adjusted Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 4(d)(iv)(2), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 4(d)(iii) hereof, shall be deemed to be outstanding. Section 4(d)(iv)(3) shall govern adjustments to the Conversion Price of the Series E Preferred Stock after the first adjustment to the Conversion Price of the Series E Preferred Stock pursuant to this Section 4(d)(iv)(2).

(3) After any adjustment to the Conversion Price of the Series E Preferred Stock pursuant to Section 4(d)(iv)(2), in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) without consideration or for a consideration per share less than Conversion Price of the Series E Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series E Preferred Stock shall be reduced concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 4(d)(iv)(3), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 4(d)(iii) hereof, shall be deemed to be outstanding.

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(v) Adjustment of Conversion Price of Series D Preferred Stock Upon Issuance of Additional Shares of Common.

(1) For so long as the Conversion Price of the Series D Preferred Stock is greater than the Series D/E Ratchet Amount, in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) for a consideration per share less than the applicable Conversion Price of the Series D Preferred Stock in effect on the date of and immediately prior to such issue, but for a consideration per share equal to or greater than the Series D/E Ratchet Amount, then the Conversion Price of the Series D Preferred Stock shall be reduced concurrently with such issue to a price (calculated to the nearest cent) equal to the per share price of the Additional Shares of Common.

(2) In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) without consideration or for a consideration per share less than the Series D/E Ratchet Amount, then the Conversion Price of the Series D Preferred Stock immediately prior to such issue shall be deemed to be equal to the Series D/E Ratchet Amount (the "**Series D Adjusted Conversion Price**"), and such Series D Adjusted Conversion Price shall be further reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Series D Adjusted Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Series D Adjusted Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 4(d)(v)(2), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 4(d)(iii) hereof, shall be deemed to be outstanding. Section 4(d)(v)(3) shall govern adjustments to the Conversion Price of the Series D Preferred Stock after the first adjustment to the Conversion Price of the Series D Preferred Stock pursuant to this Section 4(d)(v)(2).

(3) After any adjustment to the Conversion Price of the Series D Preferred Stock pursuant to Section 4(d)(v)(2), in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) without consideration or for a consideration per share less than Conversion Price of the Series D Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series D Preferred Stock shall be reduced concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 4(d)(v)(3), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible

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Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 4(d)(iii) hereof, shall be deemed to be outstanding.

(vi) Adjustment of Conversion Price of Series A, B and C Preferred Stock. In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) without consideration or for a consideration per share less than the applicable Conversion Price of the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock (if affected) shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 4(d)(vi), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 4(d)(iii) hereof, shall be deemed to be outstanding.

(vii) Determination of Consideration. For purposes of this Section 4(d), the consideration received by the Corporation for the issue (or deemed issue) of any Additional Shares of Common shall be computed as follows:

(1) Cash and Property. Such consideration shall:

(A) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation before deducting reasonable discounts, commissions or other expenses allowed, paid or incurred by the Corporation for any underwriting or otherwise in connection with such issue (or deemed issue);

(B) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(C) in the event Additional Shares of Common are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (A) and (B) above, as reasonably determined in good faith by the Board of Directors.

(2) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common deemed to have been issued pursuant to Section 4(d)(iii) shall be determined by dividing

(X) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating

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thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities by

(Y) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities.

(e) Adjustments for Subdivisions or Combinations of Common Stock. In the event the outstanding shares of Common Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Common Stock, the Conversion Price of each series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Common Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Common Stock, the Conversion Prices in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(f) Adjustments for Subdivisions or Combinations of Preferred Stock. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(g) Adjustments for Reclassification, Exchange and Substitution. Subject to Section 3 above ("**Liquidation Rights**"), if the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for above), then, in any such event, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive, each holder of such Preferred Stock shall have the right thereafter to convert such shares of Preferred Stock into a number of shares of such other class or classes of stock which a holder of the number of shares of Common Stock deliverable upon conversion of such series of Preferred Stock immediately before that change would have been entitled to receive in such reorganization or reclassification, all subject to further adjustment as provided herein with respect to such other shares.

(h) No Impairment. The Corporation will not through any reorganization, transfer of assets, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek

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to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation but will at all times in good faith assist in the carrying out of all the provisions of this Section 4 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of Preferred Stock against impairment. Notwithstanding the foregoing, nothing in this Section 4(h) shall prohibit the Corporation from amending its Articles of Incorporation with the requisite consent of its shareholders and the board of directors.

(i) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 4, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of Preferred Stock.

(j) Notices of Record Date. In the event that this Corporation shall propose at any time:

(i) to declare any dividend or distribution upon its Common Stock, whether in cash, property, stock or other securities, whether or not a regular cash dividend and whether or not out of earnings or earned surplus;

(ii) to effect any reclassification or recapitalization of its Common Stock outstanding involving a change in the Common Stock; or

(iii) to voluntarily liquidate or dissolve or to enter into any transaction deemed to be a liquidation, dissolution or winding up of the corporation pursuant to Section 3(f);

then, in connection with each such event, this Corporation shall send to the holders of the Preferred Stock at least 14 days' prior written notice of the date on which a record shall be taken for such dividend or distribution (and specifying the date on which the holders of Common Stock shall be entitled thereto) or for determining rights to vote in respect of the matters referred to in (ii) and (iii) above.

Each such written notice shall be given by first class mail, postage prepaid, addressed to the holders of Preferred Stock at the address for each such holder as shown on the books of this Corporation.

The right of the holders of the Preferred Stock to notice hereunder may be waived by the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class.

(k) Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely

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for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

(l) Waiver of Adjustment of Conversion Price. Notwithstanding anything herein to the contrary, any downward adjustment of the Conversion Price of any series of Preferred Stock may be waived by the consent or vote of the holders of more than two-thirds (2/3) of the outstanding shares of such series. Any such waiver shall bind all future holders of shares of such series of Preferred Stock.

5. Voting.

(a) Restricted Class Voting. Except as otherwise expressly provided herein or as required by law, the holders of Preferred Stock and the holders of Common Stock shall vote together and not as separate classes.

(b) No Series Voting. Other than as provided herein or required by law, there shall be no series voting.

(c) Preferred Stock. Each holder of Preferred Stock shall be entitled to the number of votes equal to the number of shares of Common Stock into which the shares of Preferred Stock held by such holder could be converted as of the record date. The holders of shares of the Preferred Stock shall be entitled to vote on all matters on which the Common Stock shall be entitled to vote. Holders of Preferred Stock shall be entitled to notice of any shareholders' meeting in accordance with the Bylaws of the Corporation. Fractional votes shall not, however, be permitted and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted), shall be disregarded.

(d) Common Stock. Each holder of shares of Common Stock shall be entitled to one vote for each share thereof held.

(e) Election of Directors. So long as at least 2,000,000 shares of Series D Preferred Stock (as adjusted for stock splits, subdivisions, combinations or stock dividends with respect to such shares) remain outstanding, the holders of the Series D Preferred Stock, voting as a separate class, shall be entitled to elect two (2) members of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's shareholders for the election of directors. So long as at least 2,000,000 shares of Series C Preferred Stock (as adjusted for stock splits, subdivisions, combinations or stock dividends with respect to such shares) remain outstanding, the holders of Series C Preferred Stock, voting as a separate class, shall be entitled to elect three (3) members of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's shareholders for the election of directors. Any additional members of the Corporation's Board of Directors shall be elected by the holders of Common Stock, Series A

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Preferred Stock, Series B Preferred Stock, and Series E Preferred Stock, voting together as a single class.

6. Amendments and Changes Requiring Approval of Preferred Stock. As long as any of the Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class:

(a) amend, alter or repeal any provision of the Articles of Incorporation or By-laws of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Preferred Stock or any series thereof;

(b) enter into any transaction or series of related transactions deemed to be a liquidation, dissolution or winding up of the Corporation pursuant to Section 3(f) above;

(c) voluntarily liquidate or dissolve;

(d) declare or pay any distribution (as defined in Section 2(d) except for distributions upon a liquidation or dissolution) with respect to the Common Stock of the Corporation;

(e) permit any subsidiary of the Corporation to sell securities to a third party (other than directors' qualifying shares in the case of subsidiaries outside the United States);

(f) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Preferred Stock;

(g) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, liquidation, redemption, conversion or other rights senior to or on a parity with any series of Preferred Stock or with respect to voting senior to any series of Preferred Stock;

(h) increase or decrease the authorized number of directors of the Corporation; or

(i) amend this Section 6.

7. Amendments and Changes Requiring the Approval of the Series E Preferred Stock.

(a) As long as any of the Series E Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least 60% of the outstanding shares of the Series E Preferred Stock:

(i) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series E Preferred Stock in a manner different from any other series of Preferred Stock; or

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(ii) amend this Section 7(a).

(b) As long as any of the Series E Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least a majority of the outstanding shares of the Series E Preferred Stock:

(i) declare or pay any distribution (as defined in Section 2(d) except for distributions upon a liquidation or dissolution) with respect to the Common Stock or Preferred Stock of the Corporation; or

(ii) amend this Section 7(b).

(c) As long as any of the Series E Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least 66 2/3% of the outstanding shares of the Series D Preferred Stock and Series E Preferred Stock voting together as a single class on an as converted to Common Stock basis:

(i) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series E Preferred Stock;

(ii) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series E Preferred Stock or with respect to voting senior to the Series E Preferred Stock; or

(iii) amend this Section 7(c).

8. Amendments and Changes Requiring the Approval of the Series D Preferred Stock.

(a) As long as any of the Series D Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least 60% of the outstanding shares of the Series D Preferred Stock:

(i) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series D Preferred Stock in a manner different from any other series of Preferred Stock; or

(ii) amend this Section 8(a).

(b) As long as any of the Series D Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least a majority of the outstanding shares of the Series D Preferred Stock:

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(i) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series D Preferred Stock;

(ii) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series D Preferred Stock or with respect to voting senior to the Series D Preferred Stock;

(iii) declare or pay any distribution (as defined in Section 2(d) except for distributions upon a liquidation or dissolution) with respect to the Common Stock or Preferred Stock of the Corporation;

(iv) increase the authorized number of directors of the Corporation above eleven (11); or

(v) amend this Section 8(b).

9. Amendments and Changes Requiring the Approval of the Series C Preferred Stock. As long as any of the Series C Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least two-thirds ($^2/_3$) of the outstanding shares of the Series C Preferred Stock:

(a) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series C Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series C Preferred Stock;

(c) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series C Preferred Stock or with respect to voting senior to the Series C Preferred Stock;

(d) declare or pay any distribution (as defined in Section 2(d) except for distributions upon a liquidation or dissolution) with respect to the Common Stock or Preferred Stock of the Corporation;

(e) increase the authorized number of directors of the Corporation above eleven (11); or

(f) amend this Section 9.

10. Amendments and Changes Requiring the Approval of the Series B Preferred Stock. As long as any of the Series B Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least two-thirds of the outstanding shares of the Series B Preferred Stock:

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(a) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series B Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series B Preferred Stock; or

(c) amend this Section 10.

11. Status of Converted Stock. In the event any shares of Preferred Stock shall be converted pursuant to Article 4 hereof, then the shares so converted shall be cancelled and shall not be issuable by the Corporation. The Articles of Incorporation shall be appropriately amended to effect the corresponding reduction in the Corporation's authorized capital stock.

12. Notices. Any notice required by the provisions of this Article IV to be given to the holders of Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at such holder's address appearing on the books of the Corporation.

ARTICLE V

1. Limitation of Directors' Liability. The liability of the directors of this Corporation for monetary damages shall be eliminated to the fullest extent permissible under California law.

2. Indemnification of Corporate Agents. This Corporation is authorized to provide indemnification of agents (as defined in Section 317 of the California Corporations Code) through bylaw provisions, agreements with agents, votes of shareholders or disinterested directors or otherwise, in excess of the indemnification otherwise permitted by Section 317 of the California Corporations Code, subject only to the applicable limits set forth in Section 204 of the California Corporations Code with respect to actions for breach of duty to this Corporation and its shareholders.

3. Repeal or Modification. Any repeal or modification of the foregoing provisions of this Article V shall not adversely affect any right of indemnification or limitation of liability permitted under California law relating to acts or omissions occurring prior to such repeal or modification.

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EXHIBIT C

SCHEDULE OF EXCEPTIONS

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FLUIDIGM CORPORATION

SERIES E PREFERRED STOCK PURCHASE AGREEMENT

UPDATED SCHEDULE OF EXCEPTIONS

October 26, 2007

FLUIDIGM CORPORATION, a Delaware corporation (the "**Company**"), hereby makes the following exceptions and additional disclosure to the representations and warranties set forth in Section 2 of the Series E Preferred Stock Purchase Agreement dated as of June 13, 2007 between the Company and the Purchasers thereunder, as amended by that certain Amendment No.1 dated December 22, 2006, and further amended by Amendment No. 2 dated October 10, 2007 and Amendment No. 3 dated October 26, 2007 (as amended, the "**Agreement**"). Except as otherwise defined herein, all capitalized terms used herein shall have the meanings given them in the Agreement. The section numbers below correspond to the section numbers of the representations and warranties in the Agreement; provided that any information disclosed herein under any section number shall be deemed to be disclosed and incorporated under any other section number under the Agreement where such disclosure would be appropriate.

Nothing in this Schedule of Exceptions is intended to broaden the scope of any representation or warranty contained in the Agreement or to create any covenant. Inclusion of any item in this Schedule of Exceptions (1) does not represent a determination that such item is material or establish a standard of materiality, (2) does not represent a determination that such item did not arise in the ordinary course of business, (3) does not represent a determination that the transactions contemplated by the Agreement require the consent of third parties, and (4) shall not constitute, or be deemed to be, an admission to any third party concerning such item. This Schedule of Exceptions includes brief descriptions or summaries of certain agreements and instruments, copies of which are available upon reasonable request. Such descriptions do not purport to be comprehensive, and are qualified in their entirety by reference to the text of the documents described.

This Schedule of Exceptions reflects exceptions and additional disclosure to the representations and warranties made by the Company set forth in Section 2 of the Agreement as of October 26, 2007, and has not been updated for Subsequent Closings. The Purchaser acknowledges that there may be changes to such exceptions and additional disclosure since October 26, 2007, and accepts the Schedule of Exceptions as of October 26, 2007.

2.1 Organization, Good Standing and Qualification

On July 18, 2007, Fluidigm Corporation, a California corporation ("Fluidigm California") was merged with and into the Company, with the Company being the surviving corporation such that the Company succeeded to all of Fluidigm California's rights and obligations, including those under the Purchase Agreement.

2.3 Subsidiaries

The Company has a wholly-owned subsidiary in Singapore, Fluidigm Singapore Pte. Ltd.

The Company has a wholly-owned subsidiary in the Netherlands, Fluidigm Europe, B.V., which has a wholly-owned subsidiary in France, Fluidigm France, S.A.R.L.

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The Company has a wholly-owned subsidiary in Japan, Fluidigm Japan K.K.

2.4 Capitalization

The Company has extended offers of option grants for up to approximately 200,000 shares of Common Stock to certain of the Company's employees and consultants in addition to the options that are currently outstanding. In addition, the Company is currently negotiating or has entered into agreements with consultants and employees for the issuance of options to purchase shares of the Company's Common Stock under the Company's 1999 Stock Option Plan.

In connection with a Development Collaboration and License Agreement (the "**Collaboration Agreement**") entered into on September 22, 2003 between the Company and Glaxo Group Limited ("**Glaxo**") and SmithKline Beecham Corporation ("**SKB**"), the Company issued warrants to purchase 90,000 shares of Series C Preferred Stock and 90,000 shares of Series C Preferred Stock to Glaxo and warrants to purchase 110,000 and 110,000 shares of Series C Preferred Stock to SKB. One of the warrants to purchase 90,000 shares of Series C Preferred Stock issued to Glaxo and one of the warrants to purchase 110,000 shares of Series C Preferred Stock issued to SKB expired pursuant to their terms and are not shown as outstanding in the Agreement.

The Company entered into various agreements with Lighthouse Capital Partners V, L.P. ("Lighthouse") as described in Section 2.14 below. In connection with these transactions, the Company borrowed $13,000,000 under the loan and security agreement and issued a warrant to Lighthouse to purchase 371,428 shares of the Company's Series D Preferred Stock. As of September 30, 2007, the Company owed approximately $9,601,037 under the notes.

The Company is a party to a License Agreement between the Company and the California Institute of Technology ("**Caltech**") dated May 1, 2000, which was amended and restated in June 2002 effective as of May 1, 2002, further amended in June 2003, with a restatement date of May 1, 2004, as further amended March 29, 2007 (collectively, the "**Caltech License Agreement**"). Pursuant to the Caltech License Agreement, the Company was obligated on an annual basis to issue to Caltech 50,000 shares of the Company's Common Stock on each occasion that the Company determined to add patent rights to the license.

The Company and Biomedical Sciences Investment Fund Pte Ltd. ("**BMSIF**") are parties to a Convertible Note Purchase Agreement dated as of December 18, 2003, as amended by Amendment No. 1 to Convertible Note Purchase Agreement dated December 17, 2004 and as further amended by a letter agreement dated June 30, 2005 (collectively, the "**CNPA**"). Pursuant to the CNPA, the Company issued a Convertible Promissory Note, as amended by Amendment to Convertible Promissory Note dated December 17, 2004, and as further amended by Amendment No. 2 to Convertible Promissory Note dated June 30, 2005 (collectively, the "**Note**") to BMSIF in exchange for $2,000,000. In December 2005, upon the successful completion of certain specified milestones by the Company, the principal amount of and the accrued interest under the Note were converted into 832,635 shares of Series D Preferred Stock at a conversion price per share of $2.80.

In addition, as a result of the Company's achieving of such specified milestones, the Company has required BMSIF to purchase an additional convertible promissory note (the "**Supplemental Note**") in the aggregate principal amount of $3,000,000 on June 20, 2006.

The principal amount of and interest on the Supplemental Note was convertible into shares of Series D Preferred Stock of the Company at a conversion price of $2.80 per share (subject to adjustment) upon the earlier of an initial public offering in connection with which the Company's

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Preferred Stock has converted into Common Stock or the satisfaction of certain specified milestones. In addition, BMSIF may electively convert the Supplemental Note into shares of Series D Preferred Stock at any time. The principal amount and interest under the Supplemental Note could not be prepaid except under limited circumstances. In July, 2007 upon completion of certain specified milestones by the Company, the principal amount of and the accrued interest under the Supplemental Note were converted into 1,157,142 shares of Series D Preferred Stock at a conversion price per share of $2.80.

The Company and Invus, L.P. are parties to a Convertible Note Agreement dated December 18, 2003, as amended by Amendment No. 1 to Convertible Note Agreement executed in November 2005 (the "**CNA**"). The CNA provides that in the event the Company issues to BMSIF Supplemental Notes in the aggregate principal amount of $3,000,000 upon the happening of certain events, Invus has the right to purchase a convertible promissory note in the principal amount of $3,000,000 (the "**Invus Note**") from the Company. Recently, Invus, L.P. and the Company decided not to issue the Invus Note.

The Company and BMSIF entered into a Convertible Note Purchase Agreement, dated as of August 7, 2006, as amended by that certain Letter Agreement dated November 15, 2006 and as further amended by that certain Letter Agreement dated January 31, 2007 (as amended, the **"2006 CNPA**"). The 2006 CNPA permits the Company to borrow up to $15 million in three $5 million tranches, subject to availability based on the achievement of specified milestones. The Company has sold and issued to BMSIF all three convertible promissory notes, each in the principal amount of $5 million. The initial two convertible promissory notes converted into 1,460,730 and 1,493,607 shares of Series E Preferred Stock on March 31, 2007. Upon conversion of the second convertible promissory note, BMSIF purchased the third (and final) convertible promissory note in the principal amount of $5 million.

In March 2003, the Company entered into (i) a Master Closing Agreement (the "**Master Closing Agreement**") with Oculus Pharmaceuticals, Inc. ("**Oculus**") and the University of Alabama Research Foundation ("**UABRF**"); (ii) a License Agreement with UABRF; and (iii) a Sponsored Research Agreement with UABRF. The Company is obligated to issue up to $2,100,000 of additional shares of its stock to UABRF in connection with the satisfaction of certain milestones. If the Company is a private Company at the time a milestone is achieved, upon achievement of a milestone, the Company is to issue shares of the series of Preferred Stock that was issued in the Company's most recent financing and the shares are to be valued at the price the shares were sold in such financing. If the Company is a public company at the time a milestone is achieved, upon achievement of a milestone, the Company is to issue shares of Common stock valued at the average closing price of the Company's Common Stock over the five trading days preceding the achievement of the milestone. In February 2005, UABRF sent a letter to the Company requesting issuance of the shares in relation to the milestones. The Company replied in writing that the milestones had not been satisfied and that it had no obligation to issue the shares at that time. The Company achieved a milestone in 2006 and as a result issued $600,000 worth of shares of its Series D Preferred Stock to UABRF and other designated parties. Following the satisfaction of the milestone, the parties have been negotiating the Company's continuing obligations, if any, under the agreements identified above, which may include an obligation on the part of the Company to issue additional shares of its stock to UABRF.

The Company is party to an offer letter with Richard DeLateur, the Company's Chief Financial Officer, which provides that in the event of a Change of Control (as defined in the offer letter) 50% of the shares subject to the option granted to Mr. DeLateur in connection with his acceptance of

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employment with the Company that are unvested at the time of such Change of Control shall become immediately vested.

The Company has approved an issuance of 6,000 shares of the Company's Common Stock to Stanford University. Such issuance has not been completed.

See Section 2.10(f) regarding Dr. Stephen R. Quake.

2.7 Government Consents

The Company makes no representation or warranty with respect to any consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with any foreign governmental entity and has assumed for purposes of the Agreement that none of the foregoing is required.

2.8 Litigation

See Section 2.10(a).

The Company has received a letter from a supplier of certain materials used in the Company's Topaz and certain other products requesting that the Company cease and desist using a lid with the materials or obtain a license from the supplier for using the design of the lid. Upon investigation, the Company determined that it had developed the lid design independently from the supplier and also began developing alternates to the materials, which are currently approved for manufacturing. The Company wrote a letter explaining these opinions to the supplier and the parties have been in negotiations regarding this matter resulting in the supplier providing a proposed settlement agreement with a $55,000 buy-out option for the Company and the Company replied with a revised draft settlement agreement. The Company is currently waiting for the supplier to comment on the revised draft settlement agreement.

2.9 Employees

William Smith, the Company's general counsel, is currently working for the Company and also remains a partner at Townsend and Townsend and Crew LLP. Mr. Smith serves on the Board of Directors of two private companies, Theracos Corporation and Arbor Vita Corporation.

Richard DeLateur, the Company's Chief Financial Officer, currently works four days a week and it is anticipated that Mr. DeLateur's service will decrease and his employment with the Company will terminate. Mr. DeLateur and the Company do not have a schedule for the eventual termination of Mr. DeLateur's employment.

2.10 Patents and Other Intangible Assets

2.10(a)

The Company has rights to the patents, trademarks and applications listed on Schedule 2.10 attached hereto, although some of the patent rights listed may not currently be being utilized by the Company in, and may not be necessary for, the Company's business as now conducted. The Company's registered domain names are fluidigm.com, fluidigm.net, fluidigm.biz, fluidigm.info and mycometrix.com.

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The Company currently is selling two product lines: (i) the Topaz crystallization microprocessors (also referred to as Integrated Fluidic Circuits or IFCs) and certain associated apparatuses; and (ii) the BioMark System, including certain IFCs, such as Dynamic Array chips, Digital Array chips (also referred to as DID chips) and ImmunoMatrix chips, as well as certain associated apparatuses. The Company has not completed investigations with respect to the Intellectual Property Rights required for the BioMark System product line or for additional applications of the Company's technology. In conjunction with this analysis, the Company has sought and will continue to seek opinions from counsel with respect to potentially relevant third party patent rights directed to, e.g., certain RealTime PCR and other PCR reagents and instruments, such as assigned to Roche Molecular Systems and/or Applied BioSystems, an Applera Corporation Business. The Company, therefore, may need to acquire additional Intellectual Property Rights to pursue those lines of business, particularly with respect to microfluidic devices for PCR and other assays, although the Company has not presently determined that blocking Intellectual Property Rights of others exist in this regard.

The Company has entered into a Collaboration Agreement dated January 24, 2005 (the "**CTI Collaboration Agreement**") with CTI Molecular Imaging, Inc. (subsequently acquired by Siemens) ("**CTI**"), under which the parties are to develop microfluidic chips and associated apparatuses for use in positron emission tomography ("**PET**"). Under the CTI Collaboration Agreement, both CTI and the Company have granted licenses to the other as necessary to conduct the research and development program contemplated by the CTI Collaboration Agreement. The Company has also granted CTI an option under certain of the Company's intellectual property to manufacture chips developed during the collaboration. The Company also has rights to intellectual property developed under the Collaboration Agreement, subject to certain restrictions under which CTI and certain other collaborating entities have specified rights in the defined PET and associated fields. Recently, Siemens notified the Company that it does not intend to exercise the option or continue the research and development program. Discussions are underway relating to the early termination of the Collaboration Agreement, and for the Company to obtain all rights to intellectual property developed under the CTI Collaboration Agreement, including intellectual property rights arising from (i) a patent application filed by Siemens and Caltech in which the Company believes that certain Company scientists should have been named as co-inventors; (ii) additional patent applications in the PET field allegedly filed by or on behalf of Siemens potentially with Caltech inventors; and (iii) CTI activities with third parties. The Company and Siemens have agreed starting in 2007 to not engage in further funded research under the CTI Collaboration Agreement.

The Company is licensee under a series of agreements with the President and Fellows of Harvard College, under which the Company pays royalties to Harvard. The Company renegotiated the terms of its agreements with Harvard and reduced the number of licenses from five to three, effective in January 2005. The Company and Harvard will be discussing potential royalty obligations of the Company to Harvard relating to transactions where the Company has received revenue but has not directly charged for product transfers, such as for certain microfluidic chips.

In January 2003, the Company entered into a Patent License Agreement with Gyros pursuant to which the Company received a non-exclusive license to certain patents from Gyros relating to the Company's products. In exchange for the license, the Company has made certain payments to Gyros. In January 2004, the Company exercised an option to add an additional field of use to the scope of the license agreement in exchange for a cash payment. In January 2007, the Company did not elect or pay for another additional field for, e.g., ImmunoMatrix chips, for which the Company has conducted and is continuing to conduct research and development activities. The Company and Gyros have had discussions regarding the extension of the field and Gyros has offered such extension pursuant to the terms of the Patent License Agreement. In addition, the Company is obligated to make royalty

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payments on certain Company products incorporating the technology licensed from Gyros. The amounts otherwise paid by the Company may be used as a credit with respect to the royalty payments. The agreement provides for certain indemnity obligations of the Company.

With respect to certain patent filings then-controlled by Oculus Pharmaceuticals with overlapping claims to the Syrrx patent referred to in the paragraph below, the Company entered into in March 2003 (i) the Master Closing Agreement; (ii) a License Agreement with UABRF (the "**UABRF License Agreement**"); and (iii) a Sponsored Research Agreement with UABRF. The license is an exclusive license, subject to certain exceptions (including rights UABRF may have previously granted Diversified Scientific, Inc. so that Diversified Scientific could perform research obligations under grants). UABRF and affiliated entities have the right to internal use of the intellectual property rights and to fulfill obligations under a National Institutes of Health grant. Pursuant to the Master Closing Agreement, the Company made an up-front payment to UABRF and granted UABRF shares of the Company's Series C Preferred Stock. The Company is obligated to issue additional shares of its stock to UABRF in the event certain milestones are achieved as described in Section 2.4 hereof. In connection with the satisfaction of a milestone, the Company may become obligated to enter into a non-transferable site license so that an entity will have the right to use the technology licensed to the Company for internal drug discovery efforts. Pursuant to the Sponsored Research Agreement, the Company agreed to support a UABRF research program. The Sponsored Research Program Agreement contains certain terms relating to the license of intellectual property rights arising out of the program. The Company has certain indemnification obligations pursuant to the agreements referred to in this paragraph.

In conjunction with the development of the Company's protein crystallization microprocessor prototype, the Company became aware of U.S. Patent no. 6,296,673, issued to the Regents of the University of California (the "**Regents**") and apparently exclusively licensed to Syrrx Corporation (note: Sam Colella of Versant Ventures, Chairman of the Company's Board of Directors, used to be Chairman of Syrrx, which has been acquired by Takeda Pharmaceutical Company Limited). Based on Syrrx's contentions of infringement with respect to the patent, related patent applications and the Company's products, the Company has sought and obtained a patent opinion from counsel with respect to the patent and entered into license negotiations with Syrrx for a license/sublicense to the patent and other patent filings assigned to the Regents and Syrrx. In December 2003, the Company entered into a license agreement with Syrrx (the "**Syrrx License Agreement**"), pursuant to which, in exchange for a field restricted and nonexclusive license under intellectual property owned or controlled by Syrrx, the Company issued Syrrx shares of the Company's Common Stock, made an up-front payment and annual minimum payments. In addition, the Company is obligated to pay a royalty in connection with the sale of certain products of the Company that incorporate the intellectual property licensed and is obligated to indemnify Syrrx for matters relating to the practice by the Company of any license or sublicense under the agreement. In January 2006, an interference was declared by the USPTO between a patent application licensed to the Company under the UABRF License Agreement and the above-identified patent and other related patents. While the interference was ongoing, the Company, Syrrx, UABRF and Athersys, Inc. (a company that allegedly acquired certain rights from Oculus) were in negotiations to settle the interference and modify the parties' obligations under the Syrrx License Agreement, the Master Closing Agreement, and the UABRF License Agreement. Recently, in an appealable decision, the USPTO invalidated all claims of both parties in the interference, and Syrrx decided not to appeal. Due to this decision and these negotiations, the Company may decide not to maintain the Syrrx License Agreement in 2008.

The Company is aware of patents and patent applications controlled by Micronics Corporation and Diversified Scientific, Inc. that potentially relate to the Company's protein crystallization product

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line. The Company has sought and obtained opinions from patent counsel regarding such patents and has conducted preliminary discussions with each of these entities regarding the possibility of obtaining a license to the relevant intellectual property. The necessity of obtaining a license from each and the outcome of such negotiations remain uncertain although in certain Micronics patent applications watched by the Company, the claims have been amended to not cover the Company's protein crystallization product line. In February 2005, Diversified Scientific announced a plan to auction its recently broadened (by USPTO re-examination) patent and other intellectual property related to crystal image analysis. The Company indicated interest to Diversified Scientific in submitting a bid. Diversified Scientific replied that it would respond to the Company and additional interested bidders after checking with their counsel on certain legal issues relating to the apparently improper broadening of patents by re-examination. The Company has not received a further response from Diversified Scientific.

With respect to the patents and patent filings described in the foregoing paragraph, those relating to the BioMark System described above and those not subject to the CTI Collaboration Agreement, there can be no assurance that the Company will be able to obtain licenses on terms acceptable to the Company. In addition, there can be no assurance that the holders of such patents or patent filings will not initiate and prevail in litigation against the Company with respect to the patents or patent filings.

The Company routinely investigates patents held by third parties to determine whether there may be any conflict with the Company Intellectual Property Rights. While such investigations are ongoing, the Company is not currently aware of any conflict except as disclosed herein.

With respect to certain microfluidics protein crystallization technology licensed to the Company from Caltech, a University of California scientist, Dr. James Berger, is a co-inventor of this technology along with certain Caltech scientists. Therefore, the Regents of the University of California own certain rights in the invention which the Company understands have been licensed to Caltech. The Company has sublicensed these rights from Caltech. As the Company is a sublicensee, if Caltech's license from the Regents were to be revoked or terminated for any reason, the Company's ability to practice and license this technology internationally would be subject to certain limitations.

See also the discussion of the possible new collaboration agreement in Section 2.17 below, the Company's license agreement with Caltech in Section 2.10(b) below and the discussion of the Company's letter from a supplier in Section 2.8 above.

2.10(b)

See Section 2.10(a) above and Schedule 2.10 attached hereto. In addition, in connection with sales of the Company's products, the Company's standard terms and conditions include limited licenses to use the Company's products, including licenses to the Company's software. The Company also has entered into (i) several prototype and other evaluation agreements and material transfer agreements with third parties, which agreements provide for the third party's use of the Company's products for a limited period of time typically in return for grant-back licenses to the Company of improvements, and (ii) material transfer agreements in which the parties may assign to each other certain intellectual property rights. The Company has sold BioMark System prototypes and products and is entering into agreements with respect to additional sales, evaluations and development agreements relating to the BioMark System. The Company typically negotiates either standstill, grant-back or other rights to certain inventions made by the Company or third parties using the prototypes. The Company intends to continue to negotiate collaboration or other agreements with third parties.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

The Exclusive Patent License Agreement dated November 2, 2000 with the Regents listed in Schedule 2.10 requires the Company to make efforts to commercialize products relating to the technology licensed to the Company. The Regents sent the Company a notice of termination of the agreement in part due to the alleged failure of the Company to make such efforts. The Regents rescinded the notice of termination and the Company intended to renegotiate the agreement to modify the requirement that the Company make efforts to commercialize the technology. The Company has received a request from the Regents for reports and diligence relating to the agreement. The Company and Regents agreed to terminate the agreement with no further obligations of either party.

In connection with entering into the most recent amendment to the Caltech License Agreement, and in response to a request from Caltech, the Company terminated its license of certain patent rights that it deemed not material to the Company's business as currently conducted in exchange for a cash payment from Caltech and a reduction in the Company's potential obligation to issue stock to Caltech. The Company understands that Caltech has licensed these patent rights to another entity, Helicos Biosciences Corporation. Dr. Steve Quake, a former director of and former consultant to the Company, co-founded Helicos, and Versant Ventures, a significant investor in the Company, is also a significant investor in Helicos. The Company believes that a conflict could exist between the license Caltech granted to Helicos and Caltech's license of patent rights to the Company, if Caltech's license with Helicos does not specifically exclude the patent rights granted to the Company. The patent rights licensed from Caltech to Helicos include a cross-reference to, and disclosure relating to, the patent rights the Company licenses from Caltech. Effective April 23, 2007, as amended May 11, 2007, the Company executed an Intellectual Property Agreement with Caltech and Helicos.

2.10(c)

See discussions in Sections 2.10(a) and (b) above.

2.10(d)

The Company utilizes certain inventions developed by Steve Quake (See discussions in Section 2.10(f) below) prior to the formation of the Company and the inventions of certain employees developed while they were working or studying at Caltech. The Company has rights to these inventions pursuant to its license agreements with Caltech described in Schedule 2.10 attached hereto.

See discussion in Section 2.9 relating to William Smith. Townsend and Townsend and Crew LLP from time to time provides legal services to Caltech and other parties with whom the Company has business relationships.

2.10(e)

See discussion in Section 2.10(b).

Steve Quake and certain employees of the Company who previously worked at or studied at Caltech have a right, pursuant to their agreements with Caltech, to receive a portion of the royalties Caltech receives under its license agreements with the Company described in Schedule 2.10 attached hereto.

The Company has license agreements with shareholders of the Company. Those license agreements are listed on Schedule 2.10 attached hereto.

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The Company's employees have executed proprietary information and invention assignment agreements in favor of the Company. The Company has executed consulting agreements with its consultants and non-disclosure agreements with third parties.

From time to time university collaborators may be on the Company's premises conducting research with the Company's chips. The Company typically does not enter into agreements relating to these arrangements. The Company has entered into an agreement with a collaborator from Regents.

2.10(f)

See discussion in Sections 2.10(a), 2.10(b) and Section 2.10(e).

The Company's rights with respects to the research and development efforts of Steve Quake are limited to those rights it has obtained through its licenses with Caltech described in Schedule 2.10 attached hereto and its consulting agreement with Steve Quake. As Dr. Quake has transferred to Stanford University effective in early 2005, the Company negotiated with Caltech to modify the Company's right to receive license rights from the Quake laboratory at Caltech. The Company also has negotiated a Material Transfer Agreement with Stanford University to obtain, for a limited term, license rights to certain inventions made by the Quake laboratory at Stanford University and is in negotiations for additional such agreements. Dr. Quake has been appointed an investigator by the Howard Hughes Medical Institute ("**HHMI**"). In connection with such appointment, Dr. Quake's affiliation with the Company (including, without limitation, stock ownership and status as a member of the Board of Directors of the Company) and the Company's rights to inventions from the Quake laboratory at Stanford University and Caltech have been eliminated or substantially curtailed. The Company has negotiated a new consulting agreement with Dr. Quake in accordance with HHMI guidelines; such consulting agreement provides for certain guaranteed payments over a multi-year time period. In addition, Dr. Quake has resigned from the Company's Board of Directors and on June 5, 2006 the Company has repurchased 123,974 shares of Dr. Quake's Common Stock holding in the Company to comport with HHMI guidelines.

2.10(h)

The Company notes that it has given the opportunity to the Purchasers to conduct any due diligence investigation that such Purchasers deemed necessary and has provided each Purchaser with all of the information that such Purchaser has requested.

2.11 Compliance with Other Instruments

See discussions in Section 2.10(a) regarding the Syrrx License Agreement and in Section 2.10(b).

2.12 Permits

The Company's subsidiary in Singapore has applied for various permits relating to the conduct of business in Singapore, some of which may not been granted.

2.13 Environmental and Safety Laws

The Company has received the following environmental reports pertaining to property that the Company leases.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1. ENVIRONMENTAL DUE DILIGENCE REVIEW OF THE SIERRA POINT ASSOCIATES TWO PROPERTIES BRISBANE AND SOUTH SAN FRANCISCO, CALIFORNIA, dated February 4, 1998, prepared by ENVIRON Corporation, Emeryville, California
2. UPDATE OF ENVIRONMENTAL DUE DILIGENCE REVIEW, PARCEL 10, SHORELINE COURT, SIERRA POINT, SOUTH SAN FRANCISCO, CALIFORNIA, dated December 14, 1998, prepared by Harding Lawson Associates, Novato, California
3. FIRST AMENDED AND RESTATED DECLARATION OF COVENANTS, CONDITIONS AND ENVIRONMENTAL RESTRICTIONS RELATING TO ENVIRONMENTAL COMPLIANCE FOR SIERRA POINT, dated August 5, 1999, recorded by Luce, Forward, Hamilton and Scripps, San Diego, California
4. SUPPLEMENTAL ENVIRONMENTAL DUE DILIGENCE, PARCEL 10, SHORELINE COURT, SIERRA POINT, SOUTH SAN FRANCISCO, CALIFORNIA, dated August 24, 1999, prepared by Harding Lawson Associates, Novato, California

Each of the reports has been made available to the Purchasers. The Company has not investigated any of the matters contained in the reports.

2.14 Title to Property and Assets

The Company and General Electric Capital Corporation ("**GECC**") entered into a Master Security Agreement (which was amended in February 2004), pursuant to which the Company has borrowed an aggregate principal amount of $6,230,152 (out of an aggregate available under the Master Security Agreement of $11,000,000) from GECC pursuant to the terms of the Master Security Agreement and series of promissory notes. The loans relate to purchases of the Company of certain equipment and software (subject to certain restrictions). The notes bear interest at rates between 8% and 9% per annum and are repaid in periodic monthly installments over 42 months from the date of issuance of each respective promissory note (except with respect to loans relating to computer equipment and software, which must be paid over 36 months). The Company's obligations under the notes and Master Security Agreement are secured by a lien on fixed assets financed with the loans. In addition, Comerica Bank has issued a letter of credit in the amount of $500,000 for the benefit of GECC as security for the loans, which is secured by a $500,000 cash account of the Company's at Comerica Bank. As of September 30, 2007, the Company owed approximately $1,340,433 under the notes.

In March 2005, the Company and Lighthouse entered into a Loan and Security Agreement, a Management Rights letter agreement, a Negative Pledge Agreement and certain other agreements (collectively, the "**Lighthouse Agreements**"). Pursuant to the Lighthouse Agreements, the Company has borrowed $13,000,000 from Lighthouse, $9,601,037 of which was outstanding as of September 30, 2007. The amounts loaned bear interest at the prime rate plus 2.5% and are to be repaid in 48 monthly installments from the execution date of March 2005. Pursuant to the Loan and Security Agreement, the Company granted Lighthouse a lien on and security interest in all of the Company's assets (subject to certain limited exceptions and excluding intellectual property rights (but not proceeds from the sale thereof) as set forth in the Lighthouse Agreements). Pursuant to the Negative Pledge Agreement, the Company is generally prohibited from transferring or encumbering intellectual property and certain other assets. The Lighthouse Agreements contain various affirmative and negative covenants of the

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Company. In connection with the Lighthouse Agreements, the Company issued to Lighthouse a warrant as described in Section 2.4 hereof. The Company's ability to pay amounts that may arise under convertible promissory notes issued, or that may be issued, to BMSIF and Invus is limited under the Lighthouse Agreements, and BMSIF and Invus entered into a Subordination Agreement with Lighthouse (which limits their right to receive payment on the convertible promissory notes).

The Company has issued letters of credit of $250,000 and $137,527 for security deposits under the subleases for its headquarters facility in South San Francisco, California (see Section 2.15(b)). In addition, the Company has issued a letter of credit for the benefit of GECC in the amount of $500,000. These letters of credit are secured by cash accounts of the Company in those amounts.

2.15 Agreements; Actions

2.15(a)

The Company has been a party to consulting agreements with Lincoln McBride, the Company's former Chief Technology Officer and vice president of engineering, and Paul Wyatt, the Company's former vice president of Topaz development and operations.

See 2.10(f) regarding Dr. Steve Quake's consulting agreements.

The Company has entered or intends to enter into indemnification agreements with each of the Company's existing officers and directors.

The Company is a party to offer letters with each of its officers.

The Company has entered into agreements relating to confidentiality and assignment of inventions with employees and enters into various agreements with employees of its subsidiaries (including, without limitation, employment agreements) customary in the jurisdiction of incorporation of the subsidiary.

The Company and/or a subsidiary of the Company have entered into agreements with third parties relating to their service on the Board of Directors of subsidiaries of the Company (due to requirements that a citizen of the place of incorporation of the subsidiary be a member of the subsidiary's Board of Directors). Among other things, such agreements contain provisions relating to indemnification.

The Company has entered into a letter agreement with Marc Unger, an employee, regarding Mr. Unger's ownership of shares and options to purchase shares of the Company's Common Stock.

In connection with the October 2001 Series C Preferred Stock financing, the Company entered into letter agreements with GE Equity Capital Investments, Inc., containing certain confidentiality and indemnification provisions and with Piper Jaffray Healthcare Venture Fund III, L. P. providing for certain matters with regard to the Small Business Investment Act.

In January 2004, the Company lent Gajus V. Worthington, the Company's Chief Executive Officer, $250,000 to be used in connection with Mr. Worthington's purchase of a residence. The loan bears interest at a rate of 3.52% per annum and the principal and interest are not due and payable for 7 years after the date of the loan (or earlier upon the happening of certain events). The loan is secured by 833,334 shares of the Company's Common Stock, which are the only recourse of the Company in the event of a default under the loan. The number of shares of Common Stock that secure the loan is

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subject to reduction at Mr. Worthington's election in the event that fair market value of the Company's Common Stock (as determined by the Company's Board of Directors) exceeds the outstanding principal and interest due under the loan.

See Sections 2.4 and 2.15(b) below relating to agreements with BMSIF.

2.15(b)

See Schedule 2.10 attached hereto and discussion in Section 2.10. Each of the agreements described or listed on Schedule 2.10 or in Section 2.10 may involve payments or obligations in excess of $100,000 and/or the license of proprietary rights.

See Section 2.14 regarding the GECC and Lighthouse loans.

In March 2004, the Company entered into a new sublease agreement with Genome Therapeutics Corporation (now Oscient Pharmaceuticals) relating to a portion of the Company's headquarters in South San Francisco, California. The term of the sublease expires in December 2007. The monthly rental payments were approximately $70,000 per month between March 2004 through September 2004. The monthly payments thereafter decreased to approximately $44,000 per month and increased approximately 3.5% annually beginning January 2006. In addition to these amounts, the Company is obligated to pay its share of common area maintenance and other costs and taxes.

In addition to the sublease agreement with Genome Therapeutics, the Company entered into a second sublease in March 2004 with MJ Research, Inc. (subsequently assigned to Are-San Francisco No. 17, LLC) relating to an additional portion of the Company's headquarters in South San Francisco, California. The term of the sublease expires in December 2007. The monthly rental payments were approximately $56,000 between April 2004 through December 2004. The monthly payments thereafter increased to approximately $58,000 per month and further increase annually by approximately 3.5% beginning in April 2005. In addition to these amounts, the Company is obligated to pay its share of common area maintenance and other costs and taxes.

The Company has entered into negotiations to extend each of the above leases from January 2008 to February 2011.

The Company has entered into leases or subleases relating to its subsidiaries in Osaka, Japan, Tokyo, Japan, Singapore and Hamburg, Germany, the last of which has terminated.

See Section 2.4, in particular with respect to the Company and BMSIF in conjunction with the convertible notes.

In certain instances, the Company has agreed to indemnify purchasers of the Company's products and certain of the Company's suppliers (such as Eppendorf AG) with respect to infringements of proprietary rights.

2.15(e)

A limited number of the Company's employees hold corporate purchasing credit cards. The Company is liable to the credit card company for the amounts charged.

2.15(f)

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

The Company has from time to time had discussions regarding mergers, acquisitions and sales of all or substantially all of the assets of the Company.

2.16 Financial Statements

The Company has made available unaudited Financial Statements for the periods ended December 31, 2005 and December 31, 2006.

The unaudited Financial Statements do not contain the footnotes required by generally accepted accounting principles and are subject to year-end audit adjustments.

2.17 Changes

Changes are reflected since December 31, 2007.

See Section 2.10 and Schedule 2.10 attached hereto.

The Company has entered into licenses of its intellectual property in the ordinary course of business.

The Company may enter into a collaboration agreement related to the development of certain specialized Dynamic Array chips for a third party that may involve revenue and liabilities in excess of $100,000, such as for indemnification.

2.18 Brokers or Finders

The Company entered into an engagement letter with Leerink Swann & Company, dated August 13, 2007.

In June 2006, Fluidigm was the recipient of a Small Technology Transfer Innovation Research (STTR) grant from the National Institutes of Health in the amount of $1,000,000 over two years. Under the grant, the Company will perform research and development activities to design a diffraction capable Topaz screening chip.

2.19 Qualified Small Business Stock

With respect to the qualification of the Shares as “qualified small business stock” under Section 1202(c) of the Code, the Company makes the following representations, each as of the date hereof: (a) the Company is a domestic C corporation, provided that the Company wholly owns non-U.S. corporate subsidiaries; (b) the Company’s gross assets have not exceeded $50 million in value at any time through the time immediately following the issuance of the Shares within the meaning of Section 1202(d); (c) the Company has not made any purchases of its own stock during the one-year period preceding the Closing with an aggregate value exceeding 5% of the aggregate value of all its stock as of the beginning of such period, disregarding de minimus redemptions within the meaning of Treasury Regulation Section 1.1202-2(b)(2); (d) the Company is engaged in a qualified trade or business as defined in Section 1202(e); and (e) 80% of the Company’s assets are used in the active conduct of that qualified trade or business.

2.20 Employee Benefit Plans

The Company offers health, vision and dental benefits, paid time off and sick leave.

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The Company's subsidiaries are subject to certain statutory requirements in their jurisdiction of incorporation relating to employee benefits. Such requirements differ from requirements in the United States.

2.21 Tax Matters

The Company's subsidiaries in the Netherlands and Singapore have received extensions to file tax returns in the respective countries.

2.24 Disclosure

The Company notes that it has given the opportunity to the Purchasers to conduct any due diligence investigation that such Purchasers deemed necessary.

The Company has provided projections to certain Purchasers at their request. For purposes of these projections, the Company has assumed, among other things, that the Company is granted tax incentives and research and development grants in Singapore that are acceptable to the Company and that the workforce to be employed at the Company's subsidiary in Singapore is capable of delivering upon the Company's plans in Singapore. In addition, the Company's revenues were lower than the Company's plan/forecasts. Moreover, actuals provided are currently under audit and subject to revision. The Company is unable to predict with any certainty its revenue for any future period, including the present quarter, and its ability to generate revenue is subject to risks and uncertainties.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
License Agreement Amended and Restated License Agreement First Amendment to Amended and Restated License Agreement Second Amended and Restated License Agreement	May 1, 2000 Restatement Date of June 1, 2002 Effective Date of June 19, 2003 Effective Date May 1, 2004	California Institute of Technology (Licensor) and the Company (Licensee)	Exclusive license of intellectual property from Licensor to the Company	The Company to pay Licensor royalties ranging from [***]% to [***]% on sales of the Company products incorporating the technology or other transfers of the technology. Also, the Company can include, on an annual basis, certain new inventions made by the Licensor by granting additional stock to the Licensor.	The U.S. Government and Licensor retained certain rights, including the right to practice the underlying inventions. With respect to the Licensor, such rights are limited to non-commercial uses. In an invention licensed pursuant to this License Agreement relating to certain protein crystallization technology in microfluidics, a University of California scientist, Dr. James Berger, was added as an inventor to related patent applications. Therefore, the Regents of the University of California own certain rights in the invention, which rights have not been licensed to the Company, and, therefore, the Company's ability to practice and license this technology internationally is subject to certain limitations.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
Exclusive Patent License Agreement	November 2, 2000 Amended on July 12, 2001	The Regents of the University of California (Licensor) and the Company (Licensee)	Exclusive license of intellectual property from Licensor to the Company	The Company to pay Licensor [***]% royalty on sales of the Company products incorporating the technology.	The Licensor and the U.S. Government retains certain rights, including the right to practice the underlying inventions. With respect to the Licensor, such rights are limited to non-commercial uses. In addition, the Company has agreed to indemnify Licensor for claims arising out of the agreement. This Agreement has been terminated.

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Co-Exclusive License Agreements (a series totaling 3) [reduced from 5]	October 15, 2000	President and Fellows of Harvard College (Licensor) and the Company (Licensee)	Co-exclusive license of intellectual property from Licensor to the Company	The Company to pay Licensor royalties ranging from [***]% to [***]% on sales of the Company products incorporating the technology or other transfers of the technology.	The Licensor and the U.S. Government retains certain rights, including the right to practice the underlying inventions. With respect to the Licensor, such rights are limited to non-commercial uses. In addition, the Company has agreed to indemnify Licensor for claims arising out of the series of agreements.

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SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
License Option Agreement	July 20, 2001	Princeton University and the Company	Grant of option to Company to negotiate a royalty-bearing license to certain technologies in exchange for paying reasonable associated patent costs	N/A	The Company expects that the U.S. Government will retain certain rights, including the right to practice the underlying inventions. The option period has expired and the Company has funded certain prosecution. The Company did not renew the option.
Agreement	July 1, 2002	Farmal LLC and the Company	Research Agreement	See Other Information	Farmal was to conduct research at Caltech within the Company's field of exclusivity under its license agreement with Caltech. The agreement contains a license to the Company of intellectual property resulting from certain aspects of the research, but the Company is uncertain whether any intellectual property was created. Farmal is not presently performing under the agreement due to its financial condition and the agreement has terminated.

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SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
Supply Agreement	December 3, 2001 Amended June 27, 2002	GlaxoSmithKline and the Company	The Company has supplied equipment and chips to GSK	The Company had received payments in exchange for chips	The Company provided certain indemnities (including relating to the infringement of proprietary rights) to GSK associated with the product sales.
Development Collaboration And License Agreement	September 22, 2003	Glaxo Group Limited and SmithKline Beecham Corporation (GSK) and the Company	A collaboration and cross-licenses agreement for the development of certain products, which may be commercialized by the Company	In addition to an up-front stock grant, the Company issued warrants to GSK exercisable upon achievement of certain milestones. Also, the Company agreed to pay royalties on products emanating from the collaboration.	The Company provides certain indemnities (including relating to the infringement of proprietary rights) to GSK associated with activities in accordance with the Agreement. Discussions between the Company and GSK have begun to ascertain milestone achievement and other matters.
Supply Agreement	September 22, 2003	GlaxoSmithKline Research & Development Limited (GSK) and the Company	The Company has supplied equipment and chips to GSK	GSK made an up-front payment to the Company for future product orders.	The Company provides certain indemnities to GSK associated with the product sales, as well as a [***] clause with respect to infringement indemnity in an accompanying stock purchase agreement.

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SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
License Agreement Amendment No. 1	January 9, 2003 January 9, 2005	Gyros AB and the Company	The Company licensed field-specific patent rights from Gyros	In addition to annual minimums and payments to add licenses in several fields, the Company pays a [***]% royalty on certain products.	The Company provides certain indemnities to Gyros associated with licensed product sales. See the disclosure in Section 2.10(a) of this Schedule of Exceptions for a further description of the agreement.
Master Closing Agreement	March 7, 2003	UAB Research Foundation, Oculus Pharmaceuticals, Inc. and the Company	Relates to the License Agreement and Sponsored Research Agreement with UAB Research Foundation described below	The Company issued shares of its stock to the UAB Research Foundation in connection with the transaction and is obligated to make milestone payments of stock and cash to UAB Research Foundation upon the happening of certain events.	See Section 3.10(a) and 2.4 of this Schedule of Exceptions relating to the Company's agreements with UAB Research Foundation and Oculus.

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SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
License Agreement	March 7, 2003	UAB Research Foundation (Licensor) and the Company	The Company is licensing certain patent rights from Licensor	When due, the Company will make milestone payments to Licensor in stock in addition to cash and stock payments up-front.	The Licensor, the U.S. Government and a third party retain certain rights to practice the underling inventions with respect to Licensor, such rights are limited to non-commercial uses. In addition, the Company has agreed to indemnify (including relating to infringement of proprietary rights) Licensor under certain conditions.
Sponsored Research Agreement	March 7, 2003	UAB Research Foundation (UAB) and the Company	The Company funds certain research at UAB	The Company makes quarterly research payments.	The Company has rights to license inventions developed under the funding.

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SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
Research License Agreement	August 2, 2002	Vanderbilt University (University) and the Company	The Company sub-licensed the University to conduct research under certain Caltech intellectual property	The Company received a license to certain intellectual property for research purposes and was granted a right of first refusal on improvements to the intellectual property it licensed to the University (including improvements to chips). In the event the Company exercises its right of first refusal, it will have to pay certain royalties and license fees against a credit.	The Company will consider proposals from the University to commercialize products developed at the University. The agreement had a three-year term and the parties are discussing an extension.
Material Transfer Agreement	December 12, 2003	[***]	The Company is testing proprietary materials	N/A	The Company has agreed to indemnify the material provider under certain conditions and not to file for patent protection encompassing the material in certain areas.

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SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
License Agreement	December 19, 2003	Syrrx, Inc. (Syrrx)	The Company licensed certain patent filings assigned to Syrrx and sublicensed patent filings assigned to the Regents of University of California in a specific field.	The Company granted common stock to Syrrx and makes annual payments for three years (then quarterly thereafter), which payments may be reduced if the Company's common stock is traded on a securities exchange or through NASDAQ. The Company also owes royalties on the license and sublicense.	The Company provides certain indemnities to Syrrx associated with the license and sublicense.
Development Agreement	June 23, 2004	In-Q-Tel and the Company	The Company provides defined services and deliverables in accordance with a statement of work; and the parties (as well as the U.S. Government) agreed to make licenses available to certain IP rights on a limited basis.	The Company receives payments based on completion of the project.	The Company has agreed to indemnify In-Q-Tel for certain claims arising under the agreement. Standard U.S. Government rights and license clauses are included.
Development Agreement	September 30, 2005	In-Q-Tel and the Company	The Company provides defined services and deliverables in accordance with a statement of work; and the parties (as well as the U.S. Government) agreed to make licenses available to certain IP rights on a limited basis.	The Company receives payments based on completion of the project.	The Company has agreed to indemnify In-Q-Tel for certain claims arising under the agreement. Standard U.S. Government rights and license clauses are included.

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SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
Development Agreement	October 1, 2007	In-Q-Tel and the Company	The Company provides defined services and deliverables in accordance with a statement of work; and the parties (as well as the U.S. Government) agreed to make licenses available to certain IP rights on a limited basis.	The Company receives payments based on completion of the project.	The Company has agreed to indemnify In-Q-Tel for certain claims arising under the agreement. Standard U.S. Government rights and license clauses are included.
Collaboration Agreement	January 24, 2005	CTI Molecular Imaging, Inc. and the Company	The Company provides defined services and deliverables in the PET field in accordance with a Work Plan under development, as well as a manufacturing option to CTI under certain Fluidigm IP. Also, the parties cross-licensed each other on certain past and future IP.	The Company received an upfront payment, an option payment if exercised, and royalties on certain products.	The Company has agreed to indemnify CTI for certain claims arising from the Agreement.
Standard User Agreement Non-Proprietary		The Regents of the University of California for LBNL and the Company	The Company is permitted to use certain LBNL facilities to conduct experiments.	N/A	The Company has agreed to indemnify LBNL for certain claims arising under the agreement. Standard U.S. Government rights and license clauses are included.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
Work for Others Agreement	January 6, 2005	The Regents of the University of California for LBNL ("DOE Contractor") and the Company	The Company is a Sponsor of federal grants, under which the Contractor is to perform certain research in accordance with a Statement of Work.	N/A	The Company has agreed to indemnify the DOE Contractor and the U.S. Government under certain product liability, intellectual property and general liability provisions. Standard U.S. Government rights and license clauses are included.
Amendment	February 4, 2005				
Work for Others Agreement	November 15, 2006				The Agreement has been extended to December 31, 2006, and another similar Agreement extended into, as noted.
Industry-University Cooperative Research Program UC Discovery Grant Research Agreement	February 1, 2007	The Regents of the University of California ("UC") and the Company	UC and the Company are collaborating on certain research specified in a joint proposal.	The Company makes bi-monthly payments and provides in-kind contributions of Company products.	The Company has agreed to indemnify UC under certain circumstances against liability, loss or expense.
Evaluation Agreement	November 16, 2004	[***] Pharmaceuticals, Inc. and the Company	[***] to evaluate certain Company products as specified in a Work Plan.	[***] to make a payment for the evaluation period.	The Company has agreed to indemnify [***] for certain claims arising under the agreement.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
Material Transfer and Evaluation Agreement	September 24, 2004	[***], Inc. and the Company	Company to receive certain biological materials from [***] and use the materials with Company products in accordance with a research plan. The parties agreed on ownership rights for certain inventions made when conducting the research, as well as associated assignment requirements.	N/A	The Company has agreed to indemnify [***] for certain claims arising under this agreement.
Material Transfer Agreement	July 18, 2005	Board of Trustees of the Leland Stanford Junior University and the Company	Company to provide certain prototype microfluidic chips to the Quake laboratory at Stanford University for use in specified research programs. The parties agreed on handling license rights to inventions generated under the agreement.	The Company receives payments for chips provided to the Quake lab (under separate invoice).	The agreement expires August 31, 2005.
Equipment Loan	January 11, 2006	Board of Trustees of the Leland Stanford Junior University and the Company	Company loaned certain equipment to the laboratory of Dr. Steve Quake.	N/A	The Company shall have no right to inventions made with the loaned equipment.
Material Transfer Agreement	March 31, 2006	[***] and the Company	[***] to evaluate assay results run by Company on certain prototype-chips.	[***] to pay the Company for certain work done under this Agreement.	[***] and the Company agreed not to file for patent protection using the other party's confidential information.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
Material Transfer and Evaluation Agreement	March 29, 2006	[***] and the Company	[***] to provide proteins for crystallization in certain Company prototype chips. The parties agreed on handling invention ownership and license rights arising under the Agreement.	N/A	The Company and [***] have agreed to cross-indemnify each other for certain claims arising under the Agreement.
Distribution Agreement (and Sublicense)	April 1, 2005	Eppendorf Deutschland and the Company	Company to distribute thermalcyclers incorporated in the BioMark reader.	The Company makes minimum product purchases based on Company estimates.	The Company provides certain indemnities (including certain product liability, intellectual property, and general liability) to Eppendorf associated with the distribution and sublicense.
Material Transfer Agreement	March 30, 2006	[***] and the Company	Company and [***] to explore contract manufacturing opportunities.	N/A	N/A
Material Transfer Agreement Microfluidic's Customer Sample Agreement	March 10, 2006 November 8, 2006	[***] and the Company	Company to test certain material from [***].	N/A	The Company has agreed to indemnify specified universities for certain claims arising under this Agreement. The Company assigns to [***] certain improvement invention made under this Material Transfer Agreement. Under the Sample Agreement, the Company and [***] agree to not file IP concerning the sample material.

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SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
Bioautomation Development Program Terms of Business	September 23, 2005 November 10, 2005 January 24, 2006	[***] and the Company	[***] is developing certain Company instrumentation products.	The Company makes regular payments based on work at [***].	The Company provides certain indemnities to [***].
Letter of Intent Amendment No. 1	May 1, 2006 December 7, 2006	[***] and the Company	Company to assist [***] in evaluating certain Company products for possible collaboration.	[***] makes regular payments to the Company	The Company has agreed to not enter certain exclusive agreements with third parties during the amended term of the LOI.
Collaboration Agreement	June 1, 2006	The Regents of the University of California (UCSF) and the Company	A collaboration regarding certain Company products.	N/A	The University and the Company agreed to certain cross-indemnification provisions. Under the Agreement, the Company will be provided an option to license certain developed technology.
Technology Evaluation and Services Agreement	August 25, 2006	[***] Inc. and the Company	[***] is evaluating certain Company products.	N/A	[***] and the Company agreed to certain cross-indemnification provisions and division of right to any new intellectual property rights arising under the Agreement.

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SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
Material Transfer Agreement	October 5, 2006	MedImmune, Inc.	MedImmune is evaluating certain Company products.	N/A	Company agreed to indemnify, MedImmune for certain activities associated with the evaluation and the Company agrees to assign certain developed technology.
Material Transfer Agreement for Transfers to Companies	November 16, 2006	University of Washington and Howard Hughes Medical Institute and the Company	The University is evaluating certain Company products.	N/A	Company agreed to indemnify University for certain activities relating to the Agreement.
Materials and Information Transfer Agreement	November 22, 2006	[***], Inc. and the Company	[***] is evaluating certain Company products.	N/A	Company agreed to indemnify [***] for certain activities relating to the evaluation and the parties agreed to divide rights to any new intellectual property arising under the Agreement
Material Transfer Agreement	December 7, 2006	Fred Hutchinson Cancer Research Center and the Company	FHCRC and the Company are collaborating to evaluate certain Company products.	N/A	Company agreed to indemnify FHCRC for certain activities associated with the Collaboration and FHCRC agrees to give Company an option to certain developed technology.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Material Transfer Agreement	March 15, 2007	[***], Inc.	[***] is evaluating certain Company products.	N/A	Company agreed to indemnify, [***] for certain activities associated with the evaluation and the Company may assign certain developed technology.

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SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
Material Transfer Agreement	May 9, 2007	Myriad Genetics	Myriad is evaluating certain Company products.	N/A	Company agreed to indemnify, Myriad for certain activities associated with the evaluation and the Company may assign certain developed technology.
Material Transfer Agreement	May 20, 2007	[***]	[***] is evaluating certain Company products.	N/A	Company agreed to indemnify, [***] for certain activities associated with the evaluation and the Company may assign certain developed technology.
Material Transfer Agreement	June 6, 2007	[***]	[***] is evaluating certain Company products.	N/A	Company agreed to indemnify, [***] for certain activities associated with the evaluation and the Company may assign certain developed technology.
Material Transfer Agreement	September 3, 2007	[***]	[***] is evaluating certain Company products.	N/A	Company agreed to indemnify, [***] for certain activities associated with the evaluation and the Company may assign certain developed technology.
Study Agreement	January 2, 2007	Merck & Co., Inc.	Merck is providing samples to the Company for testing Company products.	N/A	Company agrees to assign certain inventions to Merck related to the samples.
Evaluation Agreement	March 12, 2007	[***]	[***] to evaluate certain Company products.	N/A	N/A

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SCHEDULE 2.10
FLUIDIGM CORPORATION
AGREEMENTS

October 2007

Agreement Title	Date	Parties	Purpose of Agreement	Payments	Other Information
Exclusive Distribution Agreement	May 31, 2007	Bioke	Exclusive Distribution Agreement	N/A	Each party indemnifies the other party with respect to certain acts.
Exclusive Sales Representative Agreement	June 1, 2007	Fuentes Bono Negocios Tecnologicos S.L.	Exclusive Sales Representative	The Company to pay [***] commission of the [***] for each Fluidigm Product that is sold and shipped to a Designated End-User during the term of Agreement.	N/A
Development Agreement	October 1, 2007	In-Q-Tel and the Company	The Company provides defined services and deliverables in accordance with a statement of work; and the parties (as well as the U.S. Government) agreed to make licenses available to certain IP rights on a limited basis.	The Company receives payments based on completion of the project.	The Company has agreed to indemnify In-Q-Tel for certain claims arising under the agreement. Standard U.S. Government rights and license clauses are included.
Intellectual Property Agreement	May 11, 2007	Helicos BioSciences, Inc. and California Institute of Technology	The agreement confirms and clarifies intellectual property rights licensed to Helicos and the Company by Caltech.	N/A	See Section 2.10(b) of Schedule of Exceptions.

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
[***]					

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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Schedule 2.10 – Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
Fluidigm	[***]	Microfluidic Apparatus Having a Vaporizer and Method of Using Same	EPO		Pending
Fluidigm	[***]	Microfluidic Apparatus Having a Vaporizer and Method of Using Same	Japan	Nelson, James	Pending
Fluidigm	[***]	MICROFLUIDIC APPARATUS HAVING A VAPORIZER AND METHOD OF USING SAME	PCT	Nelson, James	Done
Fluidigm	[***]	Microfluidic apparatus having a vaporizer and method of using same	US		Pending
Fluidigm)	[***]	Microfluidic Apparatus and Method	United Kingdom		Pending
Fluidigm Corporation	[***]	Thermal Reaction Device and Method for Using the Same	Singapore		New
Fluidigm Corporation	[***]	[***]	[***]		[***]
Fluidigm Corporation	[***]	DRUG DELIVERY SYSTEM	US	Nat, Avtar	Issued
Fluidigm Corporation	[***]	DRUG DELIVERY SYSTEM	US	Nat, Avtar	Converted
Fluidigm Corporation	[***]	A MICROFLUIDIC DESIGN AUTOMATION METHOD AND SYSTEM	PCT	Lee, Michael Worthington, Gajus	Done
Fluidigm Corporation	[***]	A MICROFLUIDIC DESIGN AUTOMATION METHOD AND SYSTEM	US	Lee, Michael Worthington, Gajus Harris, Greg Montgomery, James	Issued

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Schedule 2.10 – Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	A MICROFLUIDIC DESIGN AUTOMATION METHOD AND SYSTEM	US	Lee, Michael Worthington, Gajus Harris, Greg Montgomery, James	Pending
Fluidigm Corporation	[***]	A COMPUTER AIDED DESIGN METHOD AND SYSTEM FOR DEVELOPING A MICROFLUIDIC SYSTEM	US	Lee, Michael Worthington, Gajus	Issued
Fluidigm Corporation	[***]	A COMPUTER AIDED DESIGN METHOD AND SYSTEM FOR DEVELOPING A MICROFLUIDIC SYSTEM	US	Lee, Michael Worthington, Gajus	Pending
Fluidigm Corporation	[***]	COMPUTER AIDED DESIGN METHOD AND SYSTEM FOR DEVELOPING A MICROFLUIDIC SYSTEM	US	Harris, Greg Montgomery, James Lee, Michael Worthington, Gajus	Issued
Fluidigm Corporation	[***]	COMPUTER AIDED DESIGN METHOD AND SYSTEM FOR DEVELOPING A MICROFLUIDIC SYSTEM	US	Harris, Greg Montgomery, James Lee, Michael Worthington, Gajus	Pending
Fluidigm Corporation	[***]	BIOLOGICAL DESIGN AUTOMATION SYSTEM	US	Lee, Michael Worthington, Gajus	Converted
Fluidigm Corporation	[***]	MICROFLUIDIC-BASED ELECTROSPRAY SOURCE FOR ANALYTICAL DEVICES	PCT	Manger, Ian David Hao, Cunsheng (Casey) Unger, Marc	Done
Fluidigm Corporation	[***]	MICROFLUIDIC-BASED ELECTROSPRAY SOURCE FOR ANALYTICAL DEVICES	US	Manger, Ian David Hao, Cunsheng (Casey) Unger, Marc	Pending
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES FOR INTRODUCING AND DISPENSING FLUIDS FROM MICROFLUIDIC SYSTEMS	EPO	Unger, Marc Chou, Hou-Pu Manger, Ian David Fernandez, Dave Yi, Yong	Pending
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES FOR INTRODUCING AND DISPENSING FLUIDS FROM MICROFLUIDIC SYSTEMS	PCT	Unger, Marc Chou, Hou-Pu Manger, Ian David Fernandez, Dave	Done

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Schedule 2.10 – Patents

Assignee /Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES FOR INTRODUCING AND DISPENSING FLUIDS FROM MICROFLUIDIC SYSTEMS	US	Unger, Marc Chou, Hou-Pu Manger, Ian David Fernandez, Dave Yi, Yong	Issued
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES FOR INTRODUCING AND DISPENSING FLUIDS FROM MICROFLUIDIC SYSTEMS	US	Unger, Marc Chou, Hou-Pu Manger, Ian David Fernandez, Dave Yi, Yong	Pending
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES FOR INTRODUCING AND DISPENSING FLUIDS FROM MICROFLUIDIC SYSTEMS	US	Unger, Marc Chou, Hou-Pu Manger, Ian David Fernandez, Dave	Converted
Fluidigm Corporation	[***]	MICROFLUIDIC CHROMATOGRAPHY	US	Huang, Jiang Chou, Hou-Pu Unger, Marc	Issued
Fluidigm Corporation	[***]	Microfluidic Chromatograhpy	US	Huang, Jiang	Issued
Fluidigm Corporation	[***]	MICROFLUIDIC CHROMATOGRAPHY	US	Huang, Jiang Chou, Hou-Pu Unger, Marc	Converted
Fluidigm Corporation	[***]	POLYMER SURFACE MODIFICATION	EPO	Huang, Jiang Xiao, Shaoujun Unger, Marc	Pending
Fluidigm Corporation	[***]	POLYMER SURFACE MODIFICATION	Japan	Huang, Jiang Xiao, Shaoujun Unger, Marc	Pending
Fluidigm Corporation	[***]	POLYMER SURFACE MODIFICATION	PCT	Huang, Jiang Xiao, Shaoujun Unger, Marc	Done
Fluidigm Corporation	[***]	POLYMER SURFACE MODIFICATION	US	Huang, Jiang Xiao, Shaoujun Unger, Marc	Issued

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Schedule 2.10 – Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	POLYMER SURFACE MODIFICATION	US	Huang, Jiang Xiao, Shaoujun Unger, Marc	Pending
Fluidigm Corporation	[***]	POLYMER SURFACE MODIFICATION	EPO	Huang, Jiang Xiao, Shaoujun Unger, Marc	New
Fluidigm Corporation	[***]	POLYMER SURFACE MODIFICATION	US	Huang, Jiang	Converted
Fluidigm Corporation	[***]	Microfluidic Particle — Analysis Systems	Australia	Chou , Hou-Pu Daridon, Antoine Farrell, Kevin Fowler, Brian Hao, Cunsheng (Casey) Javadi, Shervin Liau, Yish-Hann Manger, Ian David Nassef, Hany Ramez Norton, Pierce	Pending
Fluidigm Corporation	[***]	Microfluidic Particle — Analysis Systems	EPO	Chou , Hou-Pu Daridon, Antoine Farrell, Kevin Fowler, Brian Hao, Cunsheng (Casey) Javadi, Shervin Liau, Yish-Hann Manger, Ian David Nassef, Hany Ramez Norton, Pierce	Pending
Fluidigm Corporation	[***]	MICROFLUIDIC PARTICLE-BASED SYSTEMS	Japan		Pending

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Schedule 2.10 – Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	MICROFLUIDIC PARTICLE-BASED SYSTEMS	PCT	Chou, Hou-Pu Daridon, Antoine Farrell, Kevin Fowler, Brian Hao, Cunsheng (Casey) Javadi, Shervin Liau, Yish-Hann Manger, Ian David Nassef, Hany Ramez Norton, Pierce	Done
Fluidigm Corporation	[***]	MICROFLUIDIC PARTICLE-ANALYSIS SYSTEMS	US	Chou, Hou-Pu Daridon, Antoine Farrell, Kevin Fowler, Brian Liau, Yish-Hann Manger, Ian David Nassef, Hany Ramez Throndset, William	Allowed
Fluidigm Corporation	[***]	MICROFLUIDIC PARTICLE-ANALYSIS SYSTEMS	US	Chou, Hou-Pu Daridon, Antoine Farrell, Kevin Fowler, Brian Liau, Yish-Hann Manger, Ian David Nassef, Hany Ramez Throndset, William	Pending
Fluidigm Corporation	[***]	MICROFLUIDIC PARTICLE-ANALYSIS SYSTEMS	US	Daridon, Antoine	Pending

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	MICROFLUIDIC PARTICLE-ANALYSIS SYSTEMS	US	Chou, Hou-Pu Daridon, Antoine Farrell, Kevin Fowler, Brian Hao, Cunsheng (Casey) Javadi, Shervin Liau, Yish-Hann Manger, Ian David Nassef, Hany Ramez Norton, Pierce	Converted
Fluidigm Corporation	[***]	MICROFLUIDIC PARTICLE-ANALYSIS SYSTEMS	US	Chou, Hou-Pu Daridon, Antoine Farrell, Kevin Fowler, Brian Hao, Cunsheng (Casey) Javadi, Shervin Liau, Yish-Hann Manger, Ian David Nassef, Hany Ramez Norton, Pierce	Converted
Fluidigm Corporation	[***]	MICROFABRICATED FLUIDIC CIRCUIT ELEMENTS AND APPLICATIONS	Switzerland and Liechtens		Pending
Fluidigm Corporation	[***]	MICROFABRICATED FLUIDIC CIRCUIT ELEMENTS AND APPLICATIONS	Germany		Pending
Fluidigm Corporation	[***]	MICROFABRICATED FLUIDIC CIRCUIT ELEMENTS AND APPLICATIONS	EPO	Fernandez, Dave Chou, Hou-Pu Unger, Marc	Granted
Fluidigm Corporation	[***]	MICROFABRICATED FLUIDIC CIRCUIT ELEMENTS AND APPLICATIONS	France		Pending
Fluidigm Corporation	[***]	MICROFABRICATED FLUIDIC CIRCUIT ELEMENTS AND APPLICATIONS	United Kingdom		New
Fluidigm Corporation	[***]	MICROFABRICATED FLUIDIC CIRCUIT ELEMENTS AND APPLICATIONS	Ireland		Pending

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	MICROFABRICATED FLUIDIC CIRCUIT ELEMENTS AND APPLICATIONS	PCT	Fernandez , Dave Chou, Hou-Pu	Done
Fluidigm Corporation	[***]	MICROFABRICATED FLUIDIC CIRCUIT ELEMENTS AND APPLICATIONS	US	Fernandez , Dave Chou, Hou-Pu Unger, Marc	Issued
Fluidigm Corporation	[***]	Microfabricated Fluidic Circuit Elements and Applications	US	Fernandez , Dave Chou, Hou-Pu Unger, Marc	Pending
Fluidigm Corporation	[***]	MICROFABRICATED FLUIDIC CIRCUIT ELEMENTS AND APPLICATIONS	EPO	Fernandez , Dave Chou, Hou-Pu Unger, Marc	New
Fluidigm Corporation	[***]	Microfabricated Fluidic Circuit Elements and Applications	US	Fernandez , Dave Chou, Hou-Pu Unger, Marc	Issued
Fluidigm Corporation	[***]	MICROFABRICATED FLUIDIC CIRCUIT ELEMENTS AND APPLICATIONS	US	Fernandez , Dave Chou, Hou-Pu	Converted
Fluidigm Corporation	[***]	FLUIDIC TAPER ICON FOR A DISPLAY SCREEN	US	Lee , Michael Yi, Yong	Issued
Fluidigm Corporation	[***]	FLUIDIC ROTARY MIXER SQUARE ICON FOR A DISPLAY SCREEN	US	LEE , MICHAEL YI, YONG	Issued
Fluidigm Corporation	[***]	FLUIDIC BRIDGE ICON FOR A DISPLAY SCREEN	US	Lee , Michael Yi, Yong	Pending
Fluidigm Corporation	[***]	ELECTROSTATIC/ELECTROSTRICTIVE ACTUATION OF ELASTOMER STRUCTURES USING COMPLIANT ELECTRODES	US	Unger , Marc	Issued
Fluidigm Corporation	[***]	ELECTROSTATIC/ELECTROSTRICTIVE ACTUATION OF ELASTOMER STRUCTURES USING COMPLIANT ELECTRODES	US	Unger , Marc	Pending
Fluidigm Corporation	[***]	ELECTROSTRICTIVE ACTUATION OF ELASTOMER STRUCTURES USING COMPLIANT ELECTRODES	US	Unger , Marc	Converted
Fluidigm Corporation	[***]	METHODS AND DEVICES FOR ELECTRONIC AND MAGNETIC SENSING OF THE CONTENTS OF MICROFLUIDIC FLOW CHANNELS	US	Nassef , Hany Ramez Unger, Marc Facer, Geoffrey	Pending
Fluidigm Corporation	[***]	METHODS AND DEVICES FOR ELECTRONIC AND MAGNETIC SENSING OF THE CONTENTS OF MICROFLUIDIC FLOW CHANNELS	US	Nassef , Hany Ramez Unger, Marc Facer, Geoffrey	Converted

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	HIGH THROUGHPUT PCR	US	Unger , Marc Manger, Ian David Lucero, Michael	Converted
Fluidigm Corporation	[***]	Microfluidic Device and Methods of Using Same	Australia		Pending
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICE AND METHODS OF USING SAME	Canada	Unger , Marc Manger, Ian David Lucero, Michael Yi, Yong Miyashita-Lin, Emily Weinecke, Anja Facer, Geoffrey	Pending
Fluidigm Corporation	[***]	Microfluidic Device and Methods of Using Same	EPO		Pending
Fluidigm Corporation	[***]	Microfluidic Device and Methods of Using Same	Japan		Pending
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICE AND METHODS OF USING SAME	PCT	Unger , Marc Manger, Ian David Lucero, Michael Yi, Yong Miyashita-Lin, Emily Weinecke, Anja Facer, Geoffrey	Done
Fluidigm Corporation	[***]	Microfluidic Device and Methods of Using Same	Singapore		Granted
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICE AND METHODS OF USING SAME	US	Unger , Marc Manger, Ian David Lucero, Michael Yi, Yong Miyashita-Lin, Emily Weinecke, Anja Facer, Geoffrey	Issued

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICE AND METHODS OF USING SAME	US	Unger , Marc Manger, Ian David Lucero, Michael Yi, Yong Miyashita-Lin, Emily Weinecke, Anja Facer, Geoffrey	Pending
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICE AND METHODS OF USING SAME	US	Unger , Marc Manger, Ian David Lucero, Michael Yi, Yong Miyashita-Lin, Emily Weinecke, Anja Facer, Geoffrey	Pending
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICE AND METHODS OF USING SAME	US	Unger , Marc Manger, Ian David Lucero, Michael Yi, Yong Miyashita-Lin, Emily Weinecke, Anja Facer, Geoffrey	Converted
Fluidigm Corporation	[***]	RECIRCULATING FLUIDIC NETWORK AND METHODS FOR USING THE SAME	US	Manger , Ian David Barco, Joseph W. Nassef, Hany Ramez	Pending
Fluidigm Corporation	[***]	Recirculating Fluidic Network and Methods for Using the Same	US	Manger , Ian David Barco, Joseph W. Nassef, Hany Ramez	Pending
Fluidigm Corporation	[***]	Recirculating Fluidic Network and Methods for Using the Same	Japan	Manger , Ian David Barco, Joseph W. Nassef, Hany Ramez	Pending
Fluidigm Corporation	[***]	RECIRCULATING FLUIDIC NETWORK AND METHODS FOR USING THE SAME	PCT	Manger , Ian David Barco, Joseph W. Nassef, Hany Ramez	Done

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	RECIRCULATING FLUIDIC NETWORK AND METHODS FOR USING THE SAME	US	Manger , Ian David Barco, Joseph W. Nassef, Hany Ramez	Converted
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES AND METHODS OF USING SAME	Australia		New
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES AND METHODS OF USING SAME	Canada		Pending
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES AND METHODS OF USING SAME	EPO		Pending
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES AND METHODS OF USING SAME	Japan		Pending
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES AND METHODS OF USING SAME	Singapore		New
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES AND METHODS OF USING SAME	US	McBride , Lincoln Unger, Marc Lucero, Michael Nassef, Hany Ramez Facer, Geoffrey	Pending
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES AND METHODS OF USING SAME	US	Unger , Marc Huang, Jiang Quan, Emerson	Pending
Fluidigm Corporation	[***]	Thermal Reaction Device and Method for Using The Same	US	Goodsaid , Federico	Pending
Fluidigm Corporation	[***]	Thermal Reaction Device and Method for Using the Same	PCT	Unger , Marc McBride, Lincoln Facer, Geoffrey	Pending
Fluidigm Corporation	[***]	Thermal Reaction Device and Method for Using the Same	US	Unger , Marc McBride, Lincoln Facer, Geoffrey	Pending
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICE AND METHODS OF USING SAME	PCT		Done
Fluidigm Corporation	[***]	Microfluidic Device and Methods of Using Same	US		Converted
Fluidigm Corporation	[***]	Crystal Growth Devices and Systems, and Methods for Using Same	EPO	Nassef , Hany Ramez Barco, Joseph W. Facer, Geoffrey	Pending
Fluidigm Corporation	[***]	CRYSTAL GROWTH DEVICES AND SYSTEMS, AND METHODS FOR USING SAME	PCT	Nassef , Hany Ramez Barco, Joseph W. Facer, Geoffrey	Done
Fluidigm Corporation	[***]	CRYSTAL GROWTH DEVICES AND SYSTEMS, AND METHODS FOR USING SAME	US	Nassef , Hany Ramez Barco, Joseph W. Facer, Geoffrey	Pending

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	CRYSTAL GROWING DEVICES AND METHODS FOR USING THE SAME	US	Nassef , Hany Ramez Barco, Joseph W. Facer, Geoffrey	Converted
Fluidigm Corporation	[***]	CRYSTAL GROWTH DEVICES AND METHODS FOR USING THE SAME	US	Nassef , Hany Ramez Barco, Joseph W. Facer, Geoffrey	Converted
Fluidigm Corporation	[***]	CRYSTAL GROWTH DEVICES AND METHODS FOR USING THE SAME	US	Nassef , Hany Ramez Barco, Joseph W. Facer, Geoffrey	Converted
Fluidigm Corporation	[***]	METHOD AND SYSTEM FOR MICROFLUIDIC DEVICE AND IMAGING THEREOF	Australia	Quan , Emerson Taylor, Colin J. Lee, Michael Ceasar, Christopher Harris, Greg	Pending
Fluidigm Corporation	[***]	METHOD AND SYSTEM FOR MICROFLUIDIC DEVICE AND IMAGING THEREOF	Canada		Pending
Fluidigm Corporation	[***]	METHOD AND SYSTEM FOR MICROFLUIDIC DEVICE AND IMAGING THEREOF	EPO	Quan , Emerson Taylor, Colin J. Lee, Michael Ceasar, Christopher Harris, Greg	Pending
Fluidigm Corporation	[***]	METHOD AND SYSTEM FOR MICROFLUIDIC DEVICE AND IMAGING THEREOF	Japan	Quan , Emerson Taylor, Colin J. Lee, Michael Ceasar, Christopher Harris, Greg	Pending
Fluidigm Corporation	[***]	METHOD AND SYSTEM FOR MICROFLUIDIC DEVICE AND IMAGING THEREOF	PCT	Quan , Emerson Taylor, Colin J. Lee, Michael Ceasar, Christopher Harris, Greg	Done

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	METHOD AND SYSTEM FOR MICROFLUIDIC DEVICE AND IMAGING THEREOF	US	Quan , Emerson Taylor, Colin J. Lee, Michael Ceasar, Christopher Harris, Greg	Pending
Fluidigm Corporation	[***]	CRYSTAL GROWTH IMAGING SYSTEM AND METHODS FOR USING THE SAME	US	Lee , Michael Taylor, Colin J. Ceasar, Christopher Harris, Greg	Converted
Fluidigm Corporation	[***]	Image Processing Method and System for Microfluidic Devices	Australia		Pending
Fluidigm Corporation	[***]	Image Processing Method and System for Microfluidic Devices	Europe	Taylor , Colin J. Sun, Gang Dube, Simant	Pending
Fluidigm Corporation	[***]	Image Processing Method and System for Microfluidic Devices	Japan		Pending
Fluidigm Corporation	[***]	Image Processing Method and System for Microfluidic Devices	PCT		Done
Fluidigm Corporation	[***]	Image Processing Method and System for Microfluidic Devices	Singapore		Pending
Fluidigm Corporation	[***]	Image Processing Method and System for Microfluidic Devices	US	Taylor , Colin J. Sun, Gang Dube, Simant	Pending
Fluidigm Corporation	[***]	IMAGE PROCESSING METHOD AND SYSTEM FOR MICROFLUIDIC DEVICES	US	Taylor , Colin J.	Converted
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICE INCLUDING FIDUCIAL MARKINGS METHOD AND SUBSTRATE	US	Quan , Emerson	Converted
Fluidigm Corporation	[***]	IMAGE CAPTURING METHOD AND SYSTEM FOR MICROFLUIDIC DEVICES	US	Taylor , Colin J.	Pending
Fluidigm Corporation	[***]	DEVICES AND METHODS FOR HOLDING MICROFLUIDIC DEVICES	US	Nassef , Hany Ramez Facer, Geoffrey	Pending
Fluidigm Corporation	[***]	DEVICES AND METHODS FOR HOLDING MICROFLUIDIC DEVICES	US	Nassef , Hany Ramez Facer, Geoffrey	Converted
Fluidigm Corporation	[***]	Crystal Forming Devices and Systems and Methods for Using the Same	Australia		Pending
Fluidigm Corporation	[***]	Crystal Forming Devices and Systems and Methods for Using the Same	China		Pending
Fluidigm Corporation	[***]	Crystal Forming Devices and Systems and Methods for Using the Same	EPO	Unger , Marc Grossman, Robert	Pending
Fluidigm Corporation	[***]	Crystal Forming Devices and Systems and Methods for Using the Same	Japan		Pending

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	Crystal Forming Devices and Systems and Methods for Using the Same	Mexico		New
Fluidigm Corporation	[***]	Crystal Forming Devices and Systems and Methods for Using the Same	PCT	Unger , Marc Grossman, Robert	Done
Fluidigm Corporation	[***]	Crystal Forming Devices and Systems and Methods for Using the Same	Singapore		Pending
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES AND SYSTEMS AND METHODS FOR USING THE SAME	US	Unger , Marc Grossman, Robert Lam, Phillip Chou, Hou-Pu Kimball, Jake Pieprzyk, Martin	Pending
Fluidigm Corporation	[***]	INTEGRATED CHIP CARRIERS WITH THERMOCYCLER INTERFACES AND METHODS OF USING THE SAME	US	Facer , Geoffrey Grossman, Robert Unger, Marc Lam, Phillip Chou, Hou-Pu Kimball, Jake Pieprzyk, Martin Daridon, Antoine	Pending
Fluidigm Corporation	[***]	INTEGRATED CHIP CARRIERS WITH THERMOCYCLER INTERFACES AND METHODS OF USING THE SAME	US	Facer , Geoffrey Grossman, Robert Unger, Marc Lam, Phillip Chou, Hou-Pu Kimball, Jake Pieprzyk, Martin Daridon, Antoine	Pending
Fluidigm Corporation	[***]	Thermal Reaction Device and Method for Using the Same	China		Pending
Fluidigm Corporation	[***]	Thermal Reaction Device and Method for Using the Same	EPO		Pending
Fluidigm Corporation	[***]	Thermal Reaction Device and Method for Using the Same	Japan		Pending

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	Thermal Reaction Device and Method for Using the Same	PCT	Unger , Marc Grossman, Robert Lam, Phillip Chou, Hou-Pu Kimball, Jake Pieprzyk, Martin Daridon, Antoine	Done
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES AND SYSTEMS AND METHODS FOR USING THE SAME	US	Unger , Marc Grossman, Robert	Converted
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES AND SYSTEMS AND METHODS FOR USING THE SAME	US	Unger , Marc	Converted
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES AND SYSTEMS AND METHODS FOR USING THE SAME	US	Unger , Marc	Converted
Fluidigm Corporation	[***]	METHOD AND SYSTEM FOR FABRICATING VIA STRUCTURES FOR FLUIDIC MICROCHIPS	US	Unger , Marc Chou, Hou-Pu Clerkson, Barry Halderman, Jonathan	Pending
Fluidigm Corporation	[***]	METHOD AND SYSTEM FOR FABRICATING VIA STRUCTURES FOR FLUIDIC MICROCHIPS	US	Unger , Marc	Converted
Fluidigm Corporation	[***]	CRYSTALLIZATION SCALE-UP METHODS AND SYSTEMS FOR PERFORMING THE SAME	US	May , Andrew Nassef, Hany Ramez	Pending
Fluidigm Corporation	[***]	CRYSTALLIZATION SCALE-UP METHODS AND SYSTEMS FOR PERFORMING THE SAME	US	Nassef , Hany Ramez	Converted
Fluidigm Corporation	[***]	Optical Lens System and Method for Microfluidic Devices	China		Pending
Fluidigm Corporation	[***]	Optical Lens System and Method for Microfluidic Devices	EPO		Pending
Fluidigm Corporation	[***]	Optical Lens System and Method for Microfluidic Devices	Japan		Pending
Fluidigm Corporation	[***]	Optical Lens System and Method for Microfluidic Devices	PCT		Done
Fluidigm Corporation	[***]	Optical Lens System and Method for Microfluidic Devices	Singapore		Pending
Fluidigm Corporation	[***]	Optical Lens System and Method for Microfluidic Devices	US	Unger , Marc Facer, Geoffrey Clerkson, Barry Ceasar, Christopher Switz, Neil	Pending
Fluidigm Corporation	[***]	Optical Lens System and Method for Microfluidic Devices	US	Unger , Marc	Converted

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	Via Valve for Creation of 3-D Control Lines	US		New
Fluidigm Corporation	[***]	Devices, Compositions, and Methods Used for Manufacturing Microfluidic Devices	US	Fowler , Brian	New
Fluidigm Corporation	[***]	Analysis Using Microfluidic Partitioning Devices	PCT	Heid , Christian A. Daridon, Antoine	Pending
Fluidigm Corporation	[***]	Analysis Using Microfluidic Partitioning Devices	US	Heid , Christian A. Daridon, Antoine	Converted
Fluidigm Corporation	[***]	Systems for Crystallizing Molecules	US	Sun , Gang	New
Fluidigm Corporation	[***]	ANALYSIS ENGINE AND DATABASE FOR MANIPULATING PARAMETERS FOR FLUIDIC SYSTEMS ON A CHIP	PCT		Pending
Fluidigm Corporation	[***]	ANALYSIS ENGINE AND DATABASE FOR MANIPULATING PARAMETERS FOR FLUIDIC SYSTEMS ON A CHIP	US	Sun , Gang Harris, Greg May, Andrew Self, Kyle Farrell, Kevin Wyatt, Paul	Pending
Fluidigm Corporation	[***]	ANALYSIS ENGINE AND DATABASE FOR MANIPULATING PARAMETERS FOR FLUIDIC SYSTEMS ON A CHIP	US	Sun , Gang Harris, Greg May, Andrew Self, Kyle Farrell, Kevin Wyatt, Paul	Converted
Fluidigm Corporation	[***]	MICROFLUIDIC ASSAY DEVICES AND METHODS	PCT	Nassef , Hany Ramez Chou, Hou-Pu Lucero, Michael May, Andrew Yokobata, Kathy	Pending
Fluidigm Corporation	[***]	MICROFLUIDIC ASSAY DEVICES AND METHODS	US	Nassef , Hany Ramez Chou, Hou-Pu Lucero, Michael May, Andrew Yokobata, Kathy	Pending

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	MICROFLUIDIC DEVICES FOR PERFORMING IMMUNOLOGICAL ASSAYS	US	Nassef , Hany Ramez Lucero, Michael Manger, Ian David	Converted
Fluidigm Corporation	[***]	DEVICES AND METHODS FOR MICROFLUIDIC CHROMATOGRAPHY	US	Daridon , Antoine Huang, Jiang Phi, Oai May, Andrew	Pending
Fluidigm Corporation	[***]	FLUIDIC DEVICES HAVING ELASTOMERIC VALVES AND METHODS FOR MANUFACTURING SUCH DEVICES	US	Cohen , David May, Andrew Fowler, Brian	Pending
Fluidigm Corporation	[***]	FLUIDIC DEVICES HAVING ELASTOMERIC VALVES AND METHODS FOR MANUFACTURING SUCH DEVICES	US	Cohen , David May, Andrew Fowler, Brian	Converted
Fluidigm Corporation	[***]	MICROFLUIDIC REACTION APPARATUS FOR HIGH THROUGHPUT SCREENING	US	Jones , Robert Wyatt, Paul Daridon, Antoine Wang, Jing May, Andrew Cohen, David	Pending
Fluidigm Corporation	[***]	MICROFLUIDIC REACTION APPARATUS FOR HIGH THROUGHPUT SCREENING	US	Jones , Robert Wyatt, Paul Daridon, Antoine	Converted
Fluidigm Corporation	[***]	Assay Methods	US	Lucero , Michael Unger, Marc	Pending
Fluidigm Corporation	[***]	Assay Methods	US	Lucero , Michael Unger, Marc	Converted
Fluidigm Corporation	[***]	Image Analysis System for Microfluidic Devices	US	Dube , Simant Sun, Gang Zhao, Lian-She	Pending
Fluidigm Corporation	[***]	Microfluidic Check Valves	US	Wang , Jing Nassef, Hany Ramez	Pending
Fluidigm Corporation	[***]	Method and Apparatus for Biological Sample Analysis	US	Sun , Gang Jones, Robert Ramakrishnan, Ramesh	Pending

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
Fluidigm Corporation	[***]	High Efficiency and high Precision Microfluidic Devices and Methods	US	Cohen, David Wang, Jing	Pending
Fluidigm Corporation	[***]	[***]	[***]	[***]	[***]
Fluidigm Corporation	[***]	[***]	[***]	[***]	[***]
Fluidigm Corporation	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]

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Schedule 2.10 — Patents

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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
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Schedule 2.10 — Patents

Assignee/Licensor	Case No. Client Case #	Title	Country	Inventor Names	Status
		[***]			

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EXHIBIT D

FORM OF EIGHTH AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Confidential Treatment Requested by Fluidigm Corporation

FLUIDIGM CORPORATION

FORM OF

EIGHTH AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

June 13, 2006

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

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(continued)

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EIGHTH AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

THIS EIGHTH AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT (the "**Agreement**") is entered into as of June , 2006 by and among Fluidigm Corporation, a California corporation (the "**Company**"), the persons set forth on EXHIBIT A hereto (the "**New Investors**"), the persons set forth on the Schedule of Founders attached hereto as EXHIBIT B (the "**Founders**"), and the persons set forth on EXHIBIT C hereto (the "**Prior Investors**"). The Prior Investors and the New Investors are referred to herein collectively as the "**Investors**."

RECITALS

WHEREAS, the Company and the New Investors have entered into a Series E Preferred Stock Purchase Agreement of even date herewith (the "**Purchase Agreement**") pursuant to which the Company shall sell, and the New Investors shall acquire, shares of the Company's Series E Preferred Stock;

WHEREAS, the Company has granted certain registration rights and other rights to the Founders and the Prior Investors pursuant to that certain Seventh Amended and Restated Investor Rights Agreement dated August 16, 2005 (the "**Prior Agreement**"); and

WHEREAS, as an inducement to the New Investors to purchase shares of the Company's Series E Preferred Stock pursuant to the Purchase Agreement, the Company, the Prior Investors and the Founders desire to amend and restate the Prior Agreement to allow the New Investors to become a party to this Agreement.

NOW, THEREFORE, in consideration of the mutual promises and covenants hereinafter set forth, the parties agree as follows:

SECTION 1

Restrictions on Transferability; Registration Rights

1.1 Certain Definitions. As used in this Agreement, the following terms shall have the following meanings:

"**Affiliate**" shall have the meaning set forth in Rule 405 of the Securities Act; providedthat for AllianceBernstein L.P. and its permitted transferees, the definition of "Affiliate" shall also include (i) any general partner, officer or director of such person, (ii) any private equity or venture capital fund now or hereafter existing (a "**Fund**") for which such person or an Affiliate of such person is a general partner or management company, and (iii) if such person is a Fund, any other Fund that is directly or indirectly controlled by or under common control with one or more general partners of such person, or that shares the same management company with such person or an Affiliated management company.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

"**Commission**" shall mean the Securities and Exchange Commission or any other federal agency at the time administering the Securities Act.

"**Eligible Securities**" shall mean (i) the Series A Preferred Stock issued pursuant to the Series A Preferred Stock Purchase Agreement dated December 1, 1999; (ii) the Series B Preferred Stock issued pursuant to the Series B Preferred Stock Purchase Agreement dated July 5, 2000; (iii) the Series C Preferred Stock issued pursuant to the Series C Preferred Stock Purchase Agreement dated October 23, 2001; (iv) the Series C Preferred Stock issued pursuant to the Series C Preferred Stock Purchase Agreement dated November 1, 2002; (v) the Series C Preferred Stock issued pursuant to the Series C Preferred Stock and Warrant Purchase Agreement dated September 22, 2003; (vi) the Series D Preferred Stock issued pursuant to the Series D Preferred Stock Purchase Agreement dated December 18, 2003; (vii) the Series D Preferred Stock issued pursuant to the Series D Preferred Stock Purchase Agreement dated August 16, 2005; (viii) the Series D Preferred Stock issued upon conversion of convertible promissory note(s) issued pursuant to the Convertible Promissory Note Purchase Agreement (the "**CNPA**") dated December 18, 2003, as amended by Amendment No. 1 to Convertible Note Purchase Agreement dated December 17, 2004, between the Company and Biomedical Sciences Investment Fund Pte Ltd (the "**BMSIF**"); (ix) the Series D Preferred Stock issued upon conversion of convertible promissory note(s) issued in connection with the Convertible Note Agreement (the "**CNA**") dated December 18, 2003, between the Company and Invus, L.P. (the "**Invus**"); (x) the Series E Preferred Stock issued pursuant to the Purchase Agreement; (xi) all Securities acquired by any Investor pursuant to the rights of first offer described in Sections 3 or 4 of this Agreement; and (xii) any Securities issued with respect to the foregoing upon any stock split, stock dividend, recapitalization, or similar event or upon any exercise or conversion, as applicable.

"**Exchange Act**" shall mean the Securities Exchange Act of 1934, as amended, or any similar federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"**Founders Shares**" shall mean the shares of Common Stock of the Company issued to the Founders as of the date of this Agreement or at any time in the future.

"**Holder**" shall mean (i) any Investor and any person to whom registration rights under this Agreement have been transferred in accordance with Section 1.13 hereof, (ii) for the purposes of Section 1.6 (and other portions of this Section 1, to the extent they relate to rights of registration under Section 1.6), any Founder or holder of Other Shares and (iii) for the purposes of Sections 1.5, 1.6 and 1.7 (and other portions of this Section 1, to the extent they relate to rights of registration under Sections 1.5, 1.6 and 1.7), Warrantholders.

"**Initial Public Offering**" shall mean the first sale of Securities of the Company pursuant to an effective registration statement under the Securities Act.

"**Initiating Holders**" shall mean Holders who in the aggregate hold a majority of the Registrable Securities then held by Holders assuming conversion or exercise, as applicable, of all Eligible Securities.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

"**Lighthouse Preferred Warrant**" shall mean the Preferred Stock Purchase Warrant dated March 29, 2005, pursuant to which Lighthouse Capital Partners V, L.P. ("**Lighthouse**") may purchase shares of the Company's authorized Series D Preferred Stock.

"**Other Shares**" shall mean the shares of Common Stock of the Company issued pursuant to the Common Stock Purchase Agreements dated July 17, 2001 and February 2005 by and between the Company and President and Fellows of Harvard College.

"**Permitted Transferee**" shall mean (i) any general partner or retired general partner of any Holder which is a partnership; (ii) any family member of a Holder or trust for the benefit of any individual Holder; (iii) any Investor; (iv) an Affiliate of an Investor; or (v) any transferee who acquires at least 40,000 shares of Eligible Securities.

The terms "**register**," "**registered**" and "**registration**" refer to a registration effected by preparing and filing a registration statement in compliance with the Securities Act, and the declaration or ordering of the effectiveness of such registration statement.

"**Registration Expenses**" shall mean all expenses incurred by the Company in complying with Sections 1.5, 1.6 and 1.7 hereof, including, without limitation, all registration, qualification, stock exchange and filing fees, printing expenses, escrow fees, fees and disbursements of counsel for the Company and accountants and other persons retained by or for the Company (including the fees of one counsel for the Holders, not to exceed $25,000), blue sky fees and expenses, accounting fees and the expense of any special audits incident to or required by any such registration (but excluding the compensation of regular employees of the Company which shall be paid in any event by the Company).

"**Registrable Securities**" means (i) any shares of Common Stock which are Eligible Securities, (ii) any shares of Common Stock issuable upon the exercise or conversion, as applicable, of Eligible Securities, (iii) for the purposes of Section 1.6 (and other portions of this Section 1, to the extent they relate to rights of registration under Section 1.6) any shares of Common Stock which are Founder Shares or Other Shares, and (iv) for the purposes of Sections 1.5, 1.6 and 1.7 (and other portions of this Section 1, to the extent they relate to rights of registration under Sections 1.5, 1.6 and 1.7) any shares of Common Stock which are Warrant Shares; provided, however, that shares of Common Stock shall be treated as Registrable Securities only if and so long as they have not been (A) sold to or through a broker or dealer or underwriter in a public distribution or a public securities transaction, (B) sold in a transaction exempt from the registration and prospectus delivery requirements of the Securities Act under Section 4(1) thereof so that all transfer restrictions and restrictive legends with respect thereto are removed upon the consummation of such sale or (C) sold in a transaction in which the rights granted under this Section 1 are not assigned in accordance with this Agreement.

"**Restricted Securities**" shall mean the securities of the Company required to bear the legends set forth in Section 1.3 hereof.

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"**Securities**" shall mean shares of, or securities convertible into or exercisable for any shares of, any class of capital stock of the Company.

"**Securities Act**" shall mean the Securities Act of 1933, as amended, or any similar federal statute and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"**Selling Expenses**" shall mean all underwriting discounts and selling commissions and applicable to the securities registered by the Holders and any fees and disbursements of counsel for the Holders not included in the definition of Registration Expenses.

"**Voting Agreement**" shall mean the Second Amended and Restated Voting Agreement dated August 16, 2005 among the Company and certain stockholders of the Company.

"**Warrant Shares**" shall mean the shares of Common Stock of the Company issued or issuable upon conversion of the (i) Series C Preferred Stock issued or issuable upon exercise or conversion of (A) the warrant to purchase up to 17,500 shares of Series C Preferred Stock issued to TBCC Funding Trust II ("**TBCC**") pursuant to the Master Loan and Security Agreement dated March 27, 2002 by and between the Company and Transamerica Technology Finance Corporation; (B) the warrant to purchase up to 31,008 shares of Series C Preferred Stock issued to General Electric Capital Corporation ("**GE Capital**") in connection with the Master Security Agreement dated as of November 8, 2002, as amended (the "**Master Security Agreement**") by and between the Company and GE Capital; (C) the warrants to purchase an aggregate of up to 90,000 shares of Series C Preferred Stock issued to Glaxo Group Limited ("**GGL**") in connection with the Development Collaboration and License Agreement dated September 22, 2003 (the "**License Agreement**"); and (D) the warrants to purchase an aggregate of up to 110,000 shares of Series C Preferred Stock issued to SmithKline Beecham Corporation ("**SBC**") in connection with the License Agreement; and (ii) the Series D Preferred Stock issued or issuable upon exercise or conversion of (A) the warrant to purchase up to 37,500 shares of Series D Preferred Stock dated March 18, 2004 and issued to GE Capital in connection with extensions of credit to the Company; (B) the warrant to purchase up to 380,556 shares of Series D Preferred Stock dated June 30, 2004 and issued to In-Q-Tel, Inc. ("**In-Q-Tel**"); (C) the Lighthouse Preferred Warrant; and (D) the warrant to purchase up to 126,851 shares of Series D Preferred Stock dated June 30, 2004 and issued to In-Q-Tel Employee Fund, LLC ("**Employee Fund**") . GGL, SBC, TBCC, GE Capital, In-Q-Tel, Employee Fund, and Lighthouse are collectively referred to herein as "**Warrantholders**."

"**Worthington Shares**" shall mean the Founder Shares issued to Gajus Worthington.

1.2 Restrictions. No Restricted Securities shall be sold, assigned, transferred or pledged except upon the conditions specified in this Agreement. Each Holder will cause any proposed purchaser, assignee, transferee or pledgee of its Restricted Securities to agree in writing to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement, including, without limitation, Section 1.14, except where such Restricted Securities would cease to be Restricted Securities in connection with such proposed purchase, assignment, transfer or pledge.

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1.3 Restrictive Legend. Each certificate representing Registrable Securities shall (unless otherwise permitted by the provisions of Section 1.4 below) be stamped or otherwise imprinted with a legend in the following form (in addition to any legend required under applicable state securities laws):

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). SUCH SHARES MAY NOT BE SOLD, TRANSFERRED OR PLEDGED IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS THE COMPANY RECEIVES AN OPINION OF COUNSEL (WHICH MAY BE COUNSEL FOR THE COMPANY), OR OTHER EVIDENCE, REASONABLY ACCEPTABLE TO IT STATING THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF THE SECURITIES ACT."

"THE SHARES REPRESENTED BY THIS CERTIFICATE MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE SHAREHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY."

"THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A MARKET STAND-OFF AGREEMENT IN THE EVENT OF A PUBLIC OFFERING, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY."

Each Holder consents to the Company making a notation on its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer established in this Section 1.

1.4 Notice of Proposed Transfers. Each Holder of each certificate representing Restricted Securities, by acceptance thereof, agrees to comply in all respects with the restrictions on transfer contained in Sections 1.2, 1.3, 1.4 and 1.14 of this Agreement. Solely for purposes of the foregoing sentence and for the sake of clarification, the term "Holder" shall also include and the term "Restricted Securities" shall also apply to any Founder, holder of Other Shares or Warrantholders. Prior to any proposed sale, assignment, transfer or pledge of any Restricted Securities (other than any transfer not involving a change in beneficial ownership), unless there is in effect a registration statement under the Securities Act covering the proposed transfer, the Holder thereof shall give written notice to the Company of such Holder's intention to effect such transfer, sale, assignment or pledge. Each such notice shall describe the manner and circumstances of the proposed transfer, sale, assignment or pledge in sufficient detail, and shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall be, reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transfer of the Restricted Securities may be effected without registration under the Securities Act and applicable state securities laws, or (ii) a "no action" letter from the Commission

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to the effect that the transfer of such securities without registration will not result in a recommendation by the staff of the Commission that action be taken with respect thereto, or (iii) any other evidence reasonably satisfactory to counsel to the Company, whereupon the Holder of such Restricted Securities shall be entitled to transfer such Restricted Securities in accordance with the terms of the notice delivered by the Holder to the Company; provided, however, that no such legal opinion, "no action" letter or other evidence shall be required with respect to a transfer to an Affiliate. Each certificate evidencing the Restricted Securities transferred as above provided shall bear, except if such transfer is made pursuant to Rule 144, the appropriate restrictive legend set forth in Section 1.3 above, except that such certificate shall not bear such restrictive legend if, in the opinion of counsel for such Holder and reasonably acceptable to the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act or this Agreement.

1.5 Requested Registration.

(a) Request for Registration. In case the Company shall receive from Initiating Holders a written request that the Company effect any registration with respect to a public offering of at least 50% of the Registrable Securities, the reasonably anticipated aggregate price to the public of which, net of underwriting discounts and commissions, would exceed $20,000,000, the Company will:

(i) promptly give written notice of the proposed registration to all other Holders; and

(ii) use its best efforts to effect as soon as practicable such registration (including, without limitation, the execution of an undertaking to file post-effective amendments, appropriate qualification under applicable blue sky or other state securities laws and appropriate compliance with applicable regulations issued under the Securities Act and any other governmental requirements or regulations) as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any Holder or Holders joining in such request as are specified in a written request received by the Company within 15 days after receipt of the written notice from the Company; provided, however, that the Company shall not be obligated to take any action to effect any such registration pursuant to this Section 1.5:

(1) Prior to six months following the closing of the Company's Initial Public Offering;

(2) During the period starting with the date 60 days prior to the Company's estimated date of filing of, and ending on the date three months immediately following the effective date of, any registration statement (other than a registration of Securities in a Rule 145 transaction or with respect to an employee benefit plan) pertaining to Securities of the Company (subject to Section 1.6(a) hereof), provided that the Company is actively employing in good faith all reasonable efforts to cause such registration statement to be filed and become effective and that the Company provides the Initiating Holders written notice of its intent to file such

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registration statement within 30 days of receiving the request for registration from the Initiating Holders and provided further, however, that the Company may not utilize this right more than once in any 12-month period.

(3) After the Company has effected two registrations pursuant to this Section 1.5; or

(4) If the Company shall furnish to such Holders a certificate, signed by the President of the Company, stating that in the good faith judgment of the Board of Directors it would be seriously detrimental to the Company or its shareholders for a registration statement to be filed in the near future, in which case the Company's obligation to use its best efforts to register under this Section 1.5 shall be deferred for a period not to exceed 90 days from the date of receipt of written request from the Initiating Holders; provided, however, that the Company may not utilize this right more than once in any 12-month period.

(b) Underwriting. If the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as part of their request made under Section 1.5(a), and the Company shall so advise the Holders as part of the notice given pursuant to Section 1.5(a)(i). The right of any Holder to registration pursuant to Section 1.5 shall be conditioned upon such Holder's participation in the underwriting arrangements required by this Section 1.5 and the inclusion of such Holder's Registrable Securities in the underwriting, to the extent requested and provided herein.

The Company shall (together with all Holders proposing to distribute their securities through such underwriting) enter into an underwriting agreement in customary form with the managing underwriter selected for such underwriting by the Company and a majority of the Holders. Notwithstanding any other provision of this Section 1.5, if the managing underwriter advises the Company in writing that marketing factors require a limitation of the number of shares to be underwritten, then the Company shall so advise all Holders of Registrable Securities who indicated their intent to participate in the registration in a timely manner, and the number of shares of Registrable Securities that may be included in the registration and underwriting shall be allocated among such Holders in proportion, as nearly as practicable, to the respective number of Registrable Securities held by such Holders at the time of filing the registration statement, provided, however, that the number of shares of Registrable Securities to be included in such underwriting shall not be reduced unless all Worthington Shares, all Other Shares and all other Securities that are not Registrable Securities (other than Securities to be sold for the account of the Company) are first entirely excluded from the underwriting. No Registrable Securities excluded from the underwriting by reason of the underwriter's marketing limitation shall be included in such registration. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares.

If any Holder of Registrable Securities disapproves of the terms of the underwriting, such person may elect to withdraw therefrom by written notice to the Company, the managing underwriter and the Initiating Holders. The Registrable Securities so withdrawn shall also be withdrawn from registration.

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1.6 Company Registration.

(a) Notice of Registration. If at any time or from time to time, the Company shall determine to register any Common Stock, either for its own account or the account of a security holder or holders other than (i) a registration relating to employee benefit plans, (ii) a registration relating to the offer and sale of debt securities, (iii) a registration relating to a Commission Rule 145 transaction, or (iv) a registration pursuant to Sections 1.5 or 1.7 hereof, the Company will:

(i) promptly give to each Holder written notice thereof; and

(ii) include in such registration (and any related qualification under blue sky laws or other compliance), and in any underwriting involved therein, all the Registrable Securities specified in a written request or requests made within 15 days after receipt of such written notice from the Company by any Holder.

(b) Underwriting. If the registration of which the Company gives notice is for a registered public offering involving an underwriting, the Company shall so advise the Holders in a written notice given pursuant to this Section 1.6. In such event, the right of any Holder to registration pursuant to this Section 1.6 shall be conditioned upon such Holder's participation in such underwriting and the inclusion of Registrable Securities in the underwriting to the extent provided herein.

All Holders proposing to distribute their securities through such underwriting shall (together with the Company and the other holders distributing their securities through such underwriting) enter into an underwriting agreement in customary form with the managing underwriter selected for such underwriting by the Company. Notwithstanding any other provision of this Section 1.6, if the managing underwriter advises the Company in writing that marketing factors require a limitation of the number of shares to be underwritten, then the Company shall so advise all Holders of Registrable Securities and the number of shares of Registrable Securities that may be included in the registration and underwriting shall be allocated among all Holders thereof in proportion, as nearly as practicable, to the respective number of Registrable Securities held by such Holders at the time of filing the registration statement; provided, however, that, no Registrable Securities shall be excluded until all Worthington Shares, all Other Shares and all other Securities that are not Registrable Securities (other than Securities to be sold for the account of the Company) are first excluded, and provided further, that, except in the case of the Company's Initial Public Offering (where Registrable Securities may be excluded entirely), the number of Registrable Securities included in such underwriting shall not be reduced below 25% of the total number of shares in the underwriting. No Registrable Securities excluded from the underwriting by reason of the underwriter's marketing limitation shall be included in such registration. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares. The Company may include shares of Common Stock held by shareholders other than Holders in a registration statement pursuant to this Section 1.6 to the extent that the amount of Registrable Securities otherwise includible in such registration statement would not thereby be diminished.

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If any Holder or other holder disapproves of the terms of any such underwriting, he or she may elect to withdraw therefrom by written notice to the Company and the managing underwriter. The Registrable Securities so withdrawn shall also be withdrawn from such registration and, in the case of the Company's Initial Public Offering, shall be subject to Section 1.14.

(c) Right to Terminate Registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 1.6 prior to the effectiveness of such registration, whether or not any Holder has elected to include securities in such registration.

1.7 Registration on Form S-3.

(a) If any Holder or Holders request that the Company file a registration statement on Form S-3 (or any successor form to Form S-3) for a public offering of Registrable Securities, the reasonably anticipated aggregate price to the public of which, net of underwriting discounts and commissions, would exceed $2,000,000, and the Company is then entitled to use Form S-3 under applicable Commission rules to register the Registrable Securities for such an offering, the Company will:

(i) promptly give written notice of the proposed registration to all other Holders; and

(ii) use its best efforts to effect as soon as practicable such registration (including, without limitation, the execution of an undertaking to file post-effective amendments, appropriate qualification under applicable blue sky or other state securities laws and appropriate compliance with applicable regulations issued under the Securities Act and any other governmental requirements or regulations) as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any Holder or Holders joining in such request as are specified in a written request received by the Company within 15 days after receipt of the written notice from the Company; provided, however, that the Company shall not be obligated to take any action to effect any such registration pursuant to this Section 1.7:

(1) if the Company, within ten (10) days of the receipt of the request for registration pursuant to this Section 1.7, gives notice of its bona fide intention to effect the filing of a registration statement with the Commission within ninety (90) days of receipt of such request (other than with respect to a registration statement relating to a Rule 145 transaction or an employee benefit plan or any other registration which is not appropriate for the registration of Registrable Securities);

(2) during the period starting with the date sixty (60) days prior to the Company's estimated date of filing of, and ending on the date three months immediately following, the effective date of any registration statement pertaining to Securities of the Company (other than with respect to a registration statement relating to a Rule 145 transaction or an employee benefit plan), provided that the Company is actively employing in good faith all reasonable efforts to cause such registration statement to be filed and become effective; or

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(3) if the Company shall furnish to such Holder or Holders a certificate signed by the President of the Company stating that in the good faith judgment of the Board of Directors it would be seriously detrimental to the Company or its shareholders for registration statements to be filed in the near future, then the Company's obligation to use its best efforts to file a registration statement shall be deferred for a period not to exceed 90 days from the receipt of the request to file such registration by such Holder or Holders; provided further, however, that the Company may not utilize the rights provided for in subsections (1) and (2) above and this subsection (3) more than once in total in any twelve month period. For the avoidance of doubt, if the Company utilizes any of the rights provided for in subsections (1), (2) and (3), it shall not have the right to utilize the same right again; nor shall it have the right to utilize any of the other rights provided in subsections (1), (2) and (3) for twelve months.

(b) Underwriting. If the Holders requesting registration intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as part of their request made under Section 1.7(a), and the Company shall so advise the Holders as part of the notice given pursuant to Section 1.7(a)(i). The substantive provisions of Section 1.5(b) shall otherwise apply to such registration.

1.8 Expenses of Registration. All Registration Expenses incurred in connection with any registration pursuant to Sections 1.5, 1.6 and 1.7 shall be borne by the Company. If a registration proceeding is begun upon the request of Holders pursuant to Section 1.5 or 1.7, but such request is subsequently withdrawn at the request of the Holders, then the Holders of Registrable Securities to have been registered may either: (i) bear all Registration Expenses of such proceeding, pro rata on the basis of the number of shares to have been registered, in which case the Company shall be deemed not to have effected a registration pursuant to Section 1.5(a) or 1.7(a) of this Agreement as applicable; provided, however, that the Company, and not the Holders, shall be required to pay for the Registration Expenses if the Holders learn of a materially adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request promptly following discovery of such material adverse change; or (ii) if the registration is being effected pursuant to Section 1.5, require the Company to bear all Registration Expenses of such proceeding, in which case the Company shall be deemed to have effected a registration pursuant to Section 1.5(a). Unless otherwise stated, all other Selling Expenses relating to securities registered on behalf of the Holders shall be borne by the Holders of the registered securities included in such registration pro rata on the basis of the number of shares so registered, provided that to the extent a Holder elects to retain its own counsel (an "**Additional Counsel**") separate from the counsel for all the Holders permitted pursuant to the definition of "Registration Expenses" under Section 1.1, then such Holder shall exclusively bear the costs of such Additional Counsel.

1.9 Registration Procedures. In the case of each registration, qualification or compliance effected by the Company pursuant to this Section 1, the Company will keep each Holder advised in writing as to the initiation of each registration, qualification and compliance and as to the completion thereof. At its expense the Company will, as expeditiously as reasonably possible:

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(a) Prepare and file with the Commission a registration statement with respect to such Registrable Securities and use its best efforts to cause such registration statement to become effective, and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or until the distribution described in the registration statement has been completed; provided, however, that such 120-day period shall be extended for a period of time equal to the period the Holder refrains from selling any securities included in such registration at the request of an underwriter of Common Stock (or other securities) of the Company.

(b) Prepare and file with the Commission, in consultation with the Holders, such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such registration statement.

(c) Furnish to the Holders participating in such registration and to the underwriters of the securities being registered such reasonable number of copies of the registration statement, preliminary prospectus, final prospectus and such other documents as such underwriters may reasonably request in order to facilitate the public offering of such securities.

(d) Use its best efforts to register and qualify the securities covered by such registration statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably requested by the Holders; provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act.

(e) In the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering. Each Holder participating in such underwriting shall also enter into and perform its obligations under such an agreement.

(f) Notify each Holder of Registrable Securities covered by such registration statement at any time when a prospectus relating thereto is required to be delivered under the Securities Act of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading or incomplete in light of the circumstances then existing, and at the request of any such Holder, prepare and furnish to such Holder a reasonable number of copies of a supplement to or an amendment of such prospectus as may be necessary so that, as thereafter delivered to the purchasers of such shares, such prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading or incomplete in the light of the circumstances then existing.

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(g) Cause all such Registrable Securities registered pursuant hereunder to be listed on each securities exchange, or quoted in a U.S. automated inter-dealer quotation system, as the case may be, on which similar securities issued by the Company are then listed or quoted.

(h) Provide a transfer agent and registrar for all Registrable Securities registered pursuant hereunder and a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration.

(i) In the event of any underwritten public offering, cooperate with the selling Holders, the underwriters participating in the offering and their counsel in any due diligence investigation reasonably requested by the selling Holders or the underwriters in connection therewith, and participate, to the extent reasonably requested by the managing underwriter for the offering or the selling Holder, in efforts to sell the Registrable Securities under the offering (including, without limitation, participating in "roadshow" meetings with prospective investors) that would be customary for underwritten primary offerings of a comparable amount of equity securities by the Company.

1.10 Indemnification.

(a) The Company will indemnify and defend each Holder, each of its officers and directors and partners, and each person controlling such Holder within the meaning of Section 15 of the Securities Act, with respect to which registration, qualification or compliance is being effected pursuant to this Section 1, and each underwriter, if any, and each person who controls any underwriter within the meaning of Section 15 of the Securities Act, against all expenses, claims, losses, damages or liabilities (or actions in respect thereof), including any of the foregoing incurred in settlement of any litigation, commenced or threatened, arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any registration statement, prospectus, preliminary prospectus, offering circular or other document, or any amendment or supplement thereto, incident to any such registration, qualification or compliance, or based on any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, or any violation or any alleged violation by the Company of the Securities Act or the Exchange Act or any state securities law, or any rule or regulation promulgated thereunder, applicable to the Company in connection with any such registration, qualification or compliance, and the Company will reimburse each such Holder, each of its officers and directors, and each person controlling such Holder, each such underwriter and each person who controls any such underwriter, for any legal and any other expenses reasonably incurred in connection with investigating, preparing or defending any such claim, loss, damage, liability or action, as such expenses are incurred, provided that the Company will not be liable in any such case to the extent that any such claim, loss, damage, liability or expense arises out of or is based on any untrue statement or omission or alleged untrue statement or omission, made in reliance upon and in conformity with written information furnished to the Company by an instrument duly executed by such Holder, controlling person or underwriter and stated to be specifically for use therein.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(b) Each Holder will, if Registrable Securities held by such Holder are included in the securities as to which such registration, qualification or compliance is being effected, indemnify the Company, each of its directors and officers, each underwriter, if any, of the Company's securities covered by such a registration statement, each person who controls the Company or such underwriter within the meaning of Section 15 of the Securities Act, and each other such Holder, each of its officers and directors and each person controlling such Holder within the meaning of Section 15 of the Securities Act, against all claims, losses, damages and liabilities (or actions in respect thereof) arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any such registration statement, prospectus, offering circular or other document, or any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse the Company, such Holders, such directors, officers, persons, underwriters or control persons for any legal or any other expenses reasonably incurred in connection with investigating or defending any such claim, loss, damage, liability or action, as such expenses are incurred, in each case to the extent, but only if and to the extent, that such untrue statement (or alleged untrue statement) or omission (or alleged omission) is made in such registration statement, prospectus, offering circular or other document in reliance upon and in conformity with written information furnished to the Company by an instrument duly executed by such Holder and stated to be specifically for use therein; provided, however, that the liability of any Holder shall be limited to the net proceeds received by such Holder from the sale of Securities pursuant to such registration.

(c) Each party entitled to indemnification under this Section 1.10 (the "**Indemnified Party**") shall give notice to the party required to provide indemnification (the "**Indemnifying Party**") promptly after such Indemnified Party has actual knowledge of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume the defense of any such claim or any litigation resulting therefrom, provided that counsel for the Indemnifying Party, who shall conduct the defense of such claim or litigation, shall be approved by the Indemnified Party (whose approval shall not unreasonably be withheld), and the Indemnified Party may participate in such defense at such party's expense; provided, however, that an Indemnified Party (together with all other Indemnified Parties which may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the Indemnifying Party, if representation of such Indemnified Party by the counsel retained by the Indemnifying Party would be inappropriate due to actual or potential differing interests between such Indemnified Party and any other party represented by such counsel in such proceeding. The failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations under this Section 1 unless, and only to the extent that, the failure to give such notice is materially prejudicial to an Indemnifying Party's ability to defend such action. No Indemnifying Party, in the defense of any such claim or litigation, shall, except with the consent of each Indemnified Party, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect to such claim or litigation.

(d) If the indemnification provided for in this Section 1.10 is held by a court of competent jurisdiction to be unavailable to an Indemnified Party with respect to any loss,

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liability, claim, damage, or expense referred to therein, then the Indemnifying Party, in lieu of indemnifying such Indemnified Party hereunder, shall contribute to the amount paid or payable by such Indemnified Party as a result of such loss, liability, claim, damage, or expense in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party on the one hand and of the Indemnified Party on the other in connection with the statements or omissions that resulted in such loss, liability, claim, damage, or expense as well as any other relevant equitable considerations (except to the extent that contribution is not permitted under Section 11(f) of the Securities Act); provided, however, that, no Holder will be required to pay any amount under this subsection 1.10(d) in excess of the net proceeds from the sale of all Registrable Securities offered and sold by such Holder pursuant to such registration statement. The relative fault of the Indemnifying Party and of the Indemnified Party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the Indemnifying Party or by the Indemnified Party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control with respect to the rights and obligations of each of the parties to such underwriting agreement.

(f) The obligations of the Company and Holders under this Section 1.10 shall survive the completion of any offering of Registrable Securities in a registration statement under this Section 1, and otherwise.

1.11 Information by Holder. The Holder or Holders of Registrable Securities included in any registration shall furnish to the Company such information regarding such Holder or Holders, the Securities held by them and the distribution proposed by such Holder or Holders as the Company may reasonably request in writing and as shall be required in connection with any registration referred to in this Section 1.

1.12 Reports Under Securities Exchange Act of 1934. With a view to making available to the Holders the benefits of Rule 144 promulgated under the Securities Act and any other rule or regulation of the Commission that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company agrees to use its best efforts to:

(a) make and keep public information available, as those terms are understood and defined in Rule 144 under the Securities Act, at all times after the effective date that the Company becomes subject to the reporting requirements of the Securities Act or the Exchange Act;

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(b) file with the Commission in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements);

(c) register its Common Stock under Section 12 of the Exchange Act at such time as it is required to do so pursuant to the Exchange Act; and

(d) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) a written statement by the Company as to its compliance with the reporting requirements of Rule 144 (at any time after ninety (90) days after the effective date of the first registration statement filed by the Company), the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after it so qualifies), (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information in the possession of or reasonably obtainable by the Company as may be reasonably requested in availing any Holder of any rule or regulation of the Commission which permits the selling of any such securities without registration or pursuant to such form.

1.13 Transfer of Registration Rights. The rights to cause the Company to register Registrable Securities granted to the Investors under Sections 1.5, 1.6 and 1.7 may be assigned to a transferee or assignee in connection with any transfer or assignment of Eligible Securities by an Investor; provided that (a) such transfer may otherwise be effected in accordance with applicable securities laws, (b) notice of such assignment is given to the Company, (c) such transferee is a Permitted Transferee and (d) such transferee or assignee agrees to be bound by and subject to the terms and conditions of this Agreement.

1.14 Standoff Agreement.

(a) Each Holder agrees in connection with the first sale of the Company's Common Stock in a firm commitment underwritten public offering pursuant to an effective registration statement under the Securities Act, upon notice by the Company or the underwriters managing such public offering, not to sell, make any short sale of, loan, pledge (or otherwise encumber or hypothecate), grant any option for the purchase of, or otherwise directly or indirectly dispose of any Securities (other than those included in the registration) without the prior written consent of the Company and such managing underwriters for such period of time as the Board of Directors establishes pursuant to its good faith negotiations with such managing underwriters; provided, however that:

(i) such agreement shall not exceed one hundred eighty (180) days;

(ii) such agreement shall not apply to transfers to an Affiliate, provided that such Affiliate agrees to be bound by the terms of such agreement, to the same extent as if such transferee were the original party thereunder;

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(iii) a Holder shall not be subject to such agreement unless (A) all executive officers and directors of the Company, (B), all shareholders of the Company holding more than 1% of the Company's outstanding capital stock; and (C) all other Holders and holders of other registration rights, are subject to or obligated to enter into similar agreements; and

(iv) if and when any person identified in clause (iii) is released, in whole or in part, from such agreement (whether or not such release is contemplated at the time of the offering) or if any such agreement is terminated, the Holder shall be concurrently released on a pro rata basis based on the number of shares held by such person and the Holder.

(b) Each Holder agrees that prior to the Initial Public Offering it will not transfer securities of the Company unless each transferee agrees in writing to be bound by all of the provisions of this Section 1.14; provided that this Section 1.14(b) shall not apply to transfers pursuant to a registration statement.

(c) Each Holder hereby consents to the placement of stop transfer orders with the Company's transfer agent in order to enforce the foregoing provision and agrees to execute a market standoff agreement with said underwriters in customary form consistent with the provisions of this Section 1.14.

1.15 No Right to Delay Registration. No holder shall restrain, enjoin, or otherwise delay any registration hereunder, notwithstanding any controversy that might arise with respect to the interpretation or implementation of this Agreement.

1.16 Termination of Rights. No Holder shall be entitled to exercise any right provided for in this Section 1 after the earlier of (i) five (5) years following the consummation of the Initial Public Offering, and (ii) that date following the Initial Public Offering upon which each Holder holds less than 1% of the then issued and outstanding shares of capital stock of the Company and all such shares may be sold under Section 5 of the Securities Act whether pursuant to Rule 144 or another applicable exemption during any 90 day period. All other provisions hereof relating to registration rights shall continue to be effective despite any termination of such registration rights pursuant to this section.

1.17 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not enter into any agreement granting any holder or prospective holder of any securities of the Company registration rights with respect to such securities unless (i) such new registration rights, are subordinate to the registration rights granted Holders hereunder and include similar market stand-off obligations or (ii) such new registration rights are approved by the Holders of 50% of the Registrable Securities then held by Holders (assuming exercise or conversion of all outstanding Eligible Securities); provided, however, that Warrantholders may enter into this Agreement by executing and delivering a counterpart signature page to this Agreement.

SECTION 2

Affirmative Covenants of the Company

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The Company hereby covenants and agrees as follows:

2.1 Delivery of Financial Statements. The Company will furnish to each Investor who holds at least 40,000 shares of Eligible Securities (as adjusted for stock splits and combinations):

(a) as soon as reasonably practicable, an income statement for such fiscal year, a balance sheet of the Company and statement of shareholder's equity as of the end of such year, and a cash flow statement for such year, such year-end financial reports to be in reasonable detail, prepared in accordance with generally accepted accounting principles ("**GAAP**"), and audited and certified by independent public accountants of nationally recognized standing selected by the Company; and

(b) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, an unaudited income statement, cash flow statement for such fiscal quarter and an unaudited balance sheet as of the end of such fiscal quarter.

2.2 Additional Information Rights.

(a) Budget and Operating Plan. The Company will furnish to each Investor who holds at least 750,000 shares of Eligible Securities (as adjusted for stock splits and combinations) as soon as practicable upon approval or adoption by the Company's Board of Directors, and in any event within 15 days prior to the start of a fiscal year, the Company's budget and operating plan for such fiscal year.

(b) Other Information. The Company will furnish to each Investor who holds at least 750,000 shares of Eligible Securities (as adjusted for stock splits and combinations) such other information relating to the financial condition, business, prospects or corporate affairs of the Company as such Investor may from time to time request; provided, however, that the Company shall not be obligated under this subsection (b) or any other subsection of Section 2.2 to provide information which it deems in good faith to be a trade secret or similar confidential information.

(c) Inspection. The Company shall permit each Investor who holds at least 750,000 shares of Eligible Securities (as adjusted for stock splits and combinations), at such Investor's expense, to visit and inspect the Company's properties, to examine its books of account and records and to discuss the Company's affairs, finances and accounts with its officers, all at such reasonable times and during normal working hours as may be requested by such Investor; provided, however, that the Company shall not be obligated under this subsection (c) or any other subsection of Section 2.2 to provide access to information which it deems in good faith to be a trade secret or similar confidential information.

(d) Monthly Financial Statements. The Company will furnish to each Investor who holds at least 750,000 shares of Eligible Securities (as adjusted for stock splits and combinations), upon the request of such Investors, within thirty (30) days of the end of each month,

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an unaudited income statement and cash flow statement and unaudited balance sheet for and as of the end of such month, in reasonable detail.

2.3 Confidentiality. Each Investor agrees to use commercially reasonable efforts to maintain the confidentiality of information obtained pursuant to this Section 2, provided that such obligation shall not apply to (i) information previously in possession or independently developed by Investor, (ii) information publicly available other than as a result of breach of this provision (iii) information required to be disclosed by statute, regulation or court or administrative order.

2.4 Visitation Rights. One representative chosen collectively by LB I Group Inc., Lehman Brothers P.A. LLC, Lehman Brothers Partnership Account 2000/2001, L.P. and Lehman Brothers Offshore Partnership Account 2000/2001, L.P. (collectively, "**Lehman**"), one representative chosen collectively by EuclidSR Partners, L.P. and EuclidSR Biotechnology Partners, L.P. (collectively, "**EuclidSR**"), one representative chosen by Piper Jaffray Healthcare Fund III, L.P. ("**Piper Jaffray**"), one representative chosen by GE Capital Equity Investments, Inc. ("**GE Capital**"), one representative chosen collectively by Interwest Investors VII, L. P. and Interwest Partners VII, L.P. (collectively, "**Interwest**"), one representative chosen by AllianceBernstein L.P. ("**Alliance**"), and one representative chosen by BMSIF shall have the right to attend all meetings of the Board of Directors, including meetings of any committee of the Board and including the right to participate in any telephonic board meetings, so long as such Investor holds at least 750,000 shares of Eligible Securities (as adjusted for stock splits and combinations and the like). Said representative(s) shall be provided with notice of the meetings in the same manner at the same time as the members of the Board of Directors and shall be provided with any materials distributed to the Board of Directors in connection with board meetings. The foregoing visitation rights may be limited by the Board of Directors if (i), upon the advice of counsel, the Board of Directors determines that exclusion is required by third party confidentiality agreements, (ii) the Board is discussing engaging Investor or an affiliate of Investor as a financial advisor or underwriter; or (iii) the Board is discussing a material transaction with an entity in which Investor or a private equity fund affiliated with Investor is a 5% or greater shareholder, or (iv) the Board determines in good faith upon advice of counsel that limitations are required to maintain attorney-client privilege.

2.5 Stock Option Vesting. Unless otherwise decided by the Board of Directors, all option grants to employees shall vest over a four-year period with 25% of the shares subject to each option vesting a year after commencement of employment and the remainder of the shares vesting in equal amounts on a monthly basis thereafter.

2.6 Insurance. The Company shall, subject to the approval of the Board of Directors, maintain such fire, casualty and general liability insurance with coverages and in amounts as shall be determined by the Board of Directors. The Company agrees to maintain in full force and effect directors and officers liability insurance with coverage in the aggregate amount of amount of $2 million covering all of its directors. The Company will maintain coverage for the Series C Directors (as defined in the Voting Agreement) and the Series D Directors (as defined in the Voting Agreement) under such directors and officers liability insurance at all times commencing upon the Closing (as defined in the Purchase Agreement).

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2.7 Proprietary Information Agreements. Unless otherwise determined by the Board of Directors, all future employees and consultants of the Company shall be required to execute and deliver a proprietary information and invention assignment agreement.

2.8 Invention Assignments. The Company agrees to use commercially reasonable efforts to obtain from each of the individual contributing inventors for each invention that forms any part of any patent or patent application owned by or licensed to the Company, executed invention assignments in favor of the Company or the appropriate third party licensor, as the case may be.

2.9 Key-Man Life Insurance. The Company shall obtain and maintain key-man life insurance in such amount as is determined by the Company's Board of Directors, on Gajus Worthington. Such policy shall name the Company as loss payee and shall not be cancelable by the Company without prior unanimous approval of the Board of Directors.

2.10 Compliance with Laws. The Company shall use its best efforts to comply with the requirements of all applicable laws, rules, regulations and orders of any governmental authority, where noncompliance would have a material adverse effect on the Company's business and financial condition.

2.11 Termination of Covenants. The covenants set forth in Section 2 shall terminate on, and be of no further force or effect after, the closing of the Company's Initial Public Offering. The rights granted pursuant to this Section 2 are not transferable other than to Affiliates of Holders.

SECTION 3

Right of First Offer For Company Securities

3.1 Right of First Offer. Subject to the terms and conditions specified in this Section 3, the Company hereby grants to each Investor a right of first offer with respect to future sales by the Company of its Securities. An Investor shall be entitled to apportion the right of first offer hereby granted among itself and its partners and Affiliates in such proportions as it deems appropriate.

Each time the Company proposes to offer any Securities in a Financing (as defined below), the Company shall first make an offering of such Securities to each Investor in accordance with the following provisions:

(a) The Company shall deliver a notice ("**Notice**") to each Investor stating (i) its intention to offer such Securities for sale, (ii) the number of such Securities to be offered (the "**Offered Securities**"), (iii) the price, if any, for which it proposes to offer such Securities, (iv) the terms of such offer and (v) the Offer Amount (as defined below).

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(b) Within fifteen (15) calendar days after receipt of the Notice, each Investor may elect to purchase, at the price and on the terms specified in the Notice, such Securities in an amount up to the Offer Amount by providing the Company with written notice of its election.

(c) An election by an Investor pursuant to Section 3.1(b) to purchase Offered Securities shall not be considered a binding commitment on the Investor unless and until the Company receives binding commitments to purchase on the terms and conditions contained in the Notice substantially all of the Offered Securities which the Investors have not elected to purchase.

Notwithstanding the foregoing, the Company and each of the Investors acknowledge and agree that Lighthouse shall have the opportunity to invest not less than $250,000 in connection with the first Financing completed after the date of this Agreement that involves the sale and issuance by the Company of shares of the Company's convertible preferred stock with aggregate gross proceeds to the Company of at least $3 million. In the event that Lighthouse's right to purchase Offered Securities as otherwise set forth in this Section 3.1 would not permit such $250,000 investment, then each of the Investors agrees that its respective right to purchase Offered Securities pursuant to this Section 3.1 may be cut-back (proportionately with all other Investors based on the number of shares of Eligible Securities held by the Investors) in such amounts as may be necessary to permit the exercise of Lighthouse's rights as set forth herein.

3.2 Sale of Securities by Company. Within 60 days of the expiration of the period described in Section 3.1(b), any Offered Securities which the Investors have not elected to purchase may be sold by the Company to any person or persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Notice. If the Company does not complete the sale of all such Offered Securities within said 60-day period, the rights of the Investors with respect to any such unsold Offered Securities shall be deemed to be revived.

3.3 Offer Amount. The "**Offer Amount**" shall equal that percentage of the Offered Securities equal to the number of shares of Eligible Securities held by an Investor which are Registrable Securities divided by the total number of outstanding shares of Common Stock of the Company. For the purposes of the foregoing calculations, all outstanding options and warrants shall be deemed to be exercised and all Preferred Stock shall be deemed to have been converted into Common Stock at the prevailing conversion rate.

3.4 Financing. "**Financing**" shall mean an offering or series of related offerings of Securities by the Company for purposes of raising working capital in a minimum amount of $250,000. Financing shall not include (i) the issuance or sale of shares of Common Stock or options to purchase Common stock to employees, officers, directors or consultants for the primary purpose of soliciting or retaining their services in such amount as shall have been approved by the Board of Directors, (ii) the issuance or sale of Securities to leasing entities or financial institutions in connection with commercial leasing or borrowing transactions approved by the Board of Directors, (iii) the issuance or sale of Securities to third party providers of goods or services in connection with transactions approved by the Board of Directors; (iv) the sale of Securities in a registered public offering, (v) any issuances of Securities in connection with any stock split, stock dividend or recapitalization by the Company, (vi) the issuance of Securities at a price (on an as converted to

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Common Stock basis) below the original issue price of the Company's Series E Preferred Stock (as adjusted for stock splits, recapitalizations and like events) in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or any joint venture or strategic alliance, if such issuance is approved unanimously by the Board of Directors, provided that the issuance of the Company's Series E Preferred Stock to BMSIF or any Affiliate thereof or any related entity to the Singapore Economic Development Board pursuant to Section 3.4(xii) below at a price below the original issue price of the Company's Series E Preferred Stock (as adjusted for stock splits, recapitalizations and like events) shall also not be a Financing hereunder, (vii) the issuance of Securities at a price (on an as converted to Common Stock basis) at or above the original issue price of the Company's Series E Preferred Stock (as adjusted for stock splits, recapitalizations and like events) in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or any joint venture or strategic alliance, if such issuance is approved by the Board of Directors, (viii) the issuance of Securities at a price (on an as converted to Common Stock basis) below the original issue price of the Company's Series E Preferred Stock (as adjusted for stock splits, recapitalizations and like events) in connection with the acquisition of another corporation by the Company by merger, consolidation, or purchase of all or substantially all of the assets or shares of such corporation unanimously approved by the Board of Directors, (ix) the issuance of Securities at a price (on an as converted to Common Stock basis) at or above the original issue price of the Company's Series E Preferred Stock (as adjusted for stock splits, recapitalizations and like events) in connection with the acquisition of another corporation by the Company by merger, consolidation, or purchase of all or substantially all of the assets or shares of such corporation approved by the Board of Directors; (x) shares of Series E Preferred Stock issued pursuant to the terms of the Purchase Agreement; (xi) interest-bearing convertible promissory notes in the aggregate principal amount of $8 million issued or issuable pursuant to the CNPA and/or the CNA and any Securities issued on conversion thereof; and (xii) additional interest-bearing convertible promissory notes to be issued after the date hereof in the aggregate principal amount of up to $15 million to BMSIF or any Affiliate thereof or any related entity to the Singapore Economic Development Board, and any Securities issued on conversion thereof.

3.5 Termination of Right of First Offer. The right of first offer contained in this section shall not apply to and shall terminate upon the closing of an Initial Public Offering. The right of first offer granted under this Section 3 is transferable to transferees of at least 750,000 shares of Registrable Securities (as adjusted for stock splits, combinations and the like) or to Affiliates.

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SECTION 4

Right of First Offer with Respect to Founder Shares

4.1 Notice of Sales. Should a Founder (a "**Seller**") propose to accept one or more bona fide offers (collectively, the "**Purchase Offer**") from any persons ("**Purchasers**") to purchase Founders Shares from such Seller (other than as set forth 4.2(d) hereof), then such Seller shall, promptly after exercise or termination of any rights of first refusal held by the Company, deliver a notice (the "**Notice**") to the Company and all Investors holding more than 750,000 shares of Eligible Securities ("**Eligible Investors**").

4.2 Purchase Right. Each Eligible Investor shall have the right, exercisable upon written notice to such Seller within ten (10) business days after receipt of the Notice, to purchase Founders Shares on the terms and conditions specified in the Purchase Offer. To the extent an Eligible Investor exercises its right to purchase such shares in accordance with the terms and conditions set forth below, the number of shares of stock which such Seller may sell to the Purchasers pursuant to the Purchase Offer shall be correspondingly reduced. The purchase right of each Eligible Investor shall be subject to the following terms and conditions:

(a) Calculation of Shares. Each Eligible Investor may purchase all or any part of that number of Founder Shares equal to the number obtained by multiplying (i) the aggregate number of Founders Shares covered by the Purchase Offer by (ii) a fraction, the numerator of which is the number of shares of Common Stock of the Company at the time owned by such Eligible Investor and the denominator of which is the number of shares of Common Stock of the Company then outstanding. For the purposes of the foregoing calculations, all outstanding options and warrants shall be deemed to be exercised and all Preferred Stock shall be deemed to have been converted into Common Stock at the prevailing conversion rate.

(b) Delivery of Consideration. Each Eligible Investor may effect its purchase right by promptly delivering to such Seller a written notice and a check or wire transfer equal to the purchase price specified in the Purchase Offer for the number of shares the Eligible Investor desires to purchase pursuant to this Section 4.2.

(c) Certificate. Within ten (10) business days of receipt of Eligible Investor's funds pursuant to Section 4.2(c), Seller shall deliver to such Eligible Investor a certificate or certificates representing the shares of Founder Shares purchased by such Eligible Investor.

(d) Permitted Transactions. The participation rights in this Section 4 shall not pertain or apply to:

(i) Any transfer to a revocable grantor trust with respect to which the Founder and members of his family are the sole beneficiaries;

(ii) Any repurchase of Founders Shares by the Company;

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(iii) Any exercise by the Company of a right or remedy under the terms of any loan, security or stock pledge agreement where the Founders Shares serve as security for a loan made by the Company;

(iv) Any transfer to any ancestors or descendants or spouse of a Founder or to a trustee for their benefit or to a custodian for the benefit of a Founders' issue; or

(v) Any bona fide gift;

provided, however, that such Founder shall inform the Eligible Investors of such transfer or gift (other than a transfer pursuant to clause (ii) or (iii)) prior to effecting it and the transferee or donee (if other than the Company) shall furnish the Company and the Eligible Investors with a written agreement to be bound by and comply with all applicable provisions of this Agreement.

4.3 Sale of Securities by Founder. Within 60 days of the expiration of the period described in the first paragraph of Section 4.2, any Founders Shares covered by the Purchase Offer which the Eligible Investors have not elected to purchase may be sold by the Seller to the Purchasers on the terms and conditions of the Purchase Offer. If the Seller does not complete the sale of all Founders Shares covered by the Purchase Offer within such period, the rights of the Eligible Investors with respect to any such unsold Founders Shares shall be deemed to be revived.

4.4 Termination and Transfer. The restrictions imposed and rights granted by this Section 4 shall not apply to and shall terminate immediately prior to the closing of the Company's Initial Public Offering. Securities received pursuant to any stock dividend, stock split, recapitalization, or exercise of a conversion right shall be subject to this Section 4 to the same extent as the shares of the Company with respect to which they were issued. The right of first offer granted under this Section 4 is transferable to transferees of at least 750,000 shares of Registrable Securities (as adjusted for stock splits, combinations and the like) or to Affiliates.

4.5 Prohibited Transfer. Any attempt by a Founder to transfer Founders Shares in violation of Section 4 hereof shall be void and the Company agrees it will not effect such a transfer nor will it treat any alleged transferee(s) as the holder of such shares, without the written consent of two-thirds (2/3) in interest of the Eligible Investors.

SECTION 5

Right of Co-Sale

5.1 Notice of Sales. Should a Founder (a "**Seller**") propose to accept one or more bona fide offers (collectively, the "**Purchase Offer**") from any persons ("**Purchasers**") to purchase Founders Shares from such Seller (other than as set forth 5.2(d)), then such Seller shall, promptly after exercise or termination of any rights of first refusal held by the Company or the Eligible Investors, deliver a notice (the "**Notice**") to the Company and all Eligible Investors describing the terms and conditions of the Purchase Offer.

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5.2 Participation Right. Each Eligible Investor shall have the right, exercisable upon written notice to such Seller within fifteen (15) business days after receipt of the Notice, to participate in such Seller's sale of stock pursuant to the specified terms and conditions of such Purchase Offer. To the extent an Eligible Investor exercises such right of participation in accordance with the terms and conditions set forth below, the number of shares of stock which such Seller may sell pursuant to such Purchase Offer shall be correspondingly reduced. The right of participation of each Eligible Investor shall be subject to the following terms and conditions:

(a) Calculation of Shares. Each Eligible Investor may sell all or any part of that number of shares of Common Stock of the Company equal to the number obtained by multiplying (i) the aggregate number of Founders Shares covered by the Purchase Offer by (ii) a fraction, the numerator of which is the number of shares of Common Stock of the Company at the time owned by such Eligible Investor and the denominator of which is the number of shares of Common Stock of the Company then outstanding. For the purposes of the foregoing calculations, all outstanding options and warrants shall be deemed to be exercised and all Preferred Stock shall be deemed to have been converted into Common Stock at the prevailing conversion rate.

(b) Delivery of Certificates. Each Eligible Investor may effect its participation in the sale by delivering to such Seller for transfer to the Purchaser(s) one or more certificates, properly endorsed for transfer, which represent at least the number of shares of Common Stock which such Eligible Investor elects to sell pursuant to this Section 5.2.

(c) Transfer. The stock certificate or certificates which the Eligible Investor delivers to such Seller pursuant to Section 5.2 shall be delivered by the Seller to the Purchaser(s) in consummation of the sale of the Securities pursuant to the terms and conditions specified in the Notice, and such Seller shall promptly thereafter remit to such Eligible Investor that portion of the sale proceeds to which such Eligible Investor is entitled by reason of its participation in such sale.

(d) Permitted Transactions. The participation rights in this Section 5 shall not pertain or apply to:

(i) Any transfer to a revocable grantor trust with respect to which the Seller and members of his family are the sole beneficiaries;

(ii) Any repurchase of Founders Shares by the Company;

(iii) Any exercise by the Company of a right or remedy under the terms of any loan, security or stock pledge agreement where the Founders Shares serve as security for a loan made by the Company;

(iv) Any transfer to any ancestors or descendants or spouse of a Founder or to a trustee for their benefit or to a custodian for the benefit of a Founders' issue; or

(v) Any bona fide gift;

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provided, however, that such Founder shall inform the Eligible Investors of such transfer or gift (other than a transfer pursuant to clause (ii) or (iii)) prior to effecting it and the transferee or donee (if other than the Company) shall furnish the Company and the Eligible Investors with a written agreement to be bound by and comply with all applicable provisions of this Agreement.

5.3 Sale of Securities by Founder. Within 45 days of the expiration of the period described in the first paragraph of Section 5.2, any Founders Shares covered by the Purchase Offer which the Eligible Investors have not elected to purchase may be sold by the Seller to the Purchasers on the terms and conditions of the Purchase Offer. If the Seller does not complete the sale of all Founders Shares covered by the Purchase Offer within such period, the rights of the Eligible Investors with respect to any such unsold Founders Shares shall be deemed to be revived.

5.4 Termination and Transfer. The restrictions imposed and rights granted by this Section 5 shall not apply to and shall terminate immediately prior to the closing of the Company's Initial Public Offering. Securities received pursuant to any stock dividend, stock split, recapitalization, or exercise of a conversion right shall be subject to this Section 5 to the same extent as the shares of the Company with respect to which they were issued. The co-sale right granted under this Section 5 is transferable to transferees of at least 750,000 shares of Registrable Securities (as adjusted for stock splits, combinations and the like) or to Affiliates.

5.5 Prohibited Transfers.

(a) In the event any Founder should sell any Founders Shares in contravention of the co-sale rights of the Investors under Section 5 (a "**Prohibited Transfer**"), the Investors, in addition to such other remedies as may be available at law, in equity or hereunder, shall have the put option provided below, and the Founder shall be bound by the applicable provisions of such option.

(b) In the event of a Prohibited Transfer, each Eligible Investor shall have the right to sell to the Founder the type and number of shares of Common Stock equal to the number of shares that such Eligible Investor would have been entitled to transfer to the third-party transferee(s) under Section 5.2 hereof had the Prohibited Transfer been effected pursuant to and in compliance with the terms thereof. Such sale shall be made on the following terms and conditions:

(i) The price per share at which the shares are to be sold to the Founder shall be equal to the price per share paid by the third-party transferee(s) to the Founder in the Prohibited Transfer. Such price per share shall be paid to the Eligible Investor in cash if the Founder received cash for his shares. If the Founder did not receive cash but received other property instead, the price per share to be paid to the Eligible Investor shall be paid (A) in the form of the property received by the Founder for his shares, or (B) in cash equal to the fair market value of the property received by such Founder as determined in good faith by the Company's Board of Directors, at the option of the Eligible Investor. The Founder shall also reimburse each Eligible Investor for any and all fees and expense, including legal fees and expenses, incurred pursuant to the exercise or the attempted exercise of the Eligible Investor's rights under Section 5.

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(ii) Within thirty (30) days after the later of the dates on which the Eligible Investor (A) received notice of the Prohibited Transfer or (B) otherwise became aware of the Prohibited Transfer, each Eligible Investor shall, if exercising the option created hereby, deliver to the Founder the certificate or certificates representing shares to be sold, each certificate to be properly endorsed for transfer.

(iii) The Founder shall, upon receipt of the certificate or certificates for the shares to be sold by an Eligible Investor pursuant to this Section 5, pay the aggregate purchase price therefor and the amount of reimbursable fees and expenses, as specified in subparagraph 5.5(b)(i), in cash or by other means acceptable to the Eligible Investor.

(c) Notwithstanding the foregoing, any attempt by a Founder to transfer Founders Shares in violation of Section 5 hereof shall be void and the Company agrees it will not effect such a transfer nor will it treat any alleged transferee(s) as the holder of such shares, without the written consent of two-thirds (2/3) in interest of the Eligible Investors.

SECTION 6

Miscellaneous

6.1 Governing Law; Jurisdiction. This Agreement shall be construed in accordance with, and governed in all respects by, the laws of the State of California, as applied to agreements entered into, and to be performed entirely in such state, between residents of such state.

The parties hereto agree to submit to the jurisdiction of the federal and state courts of San Mateo County, California with respect to the breach or interpretation of this Agreement or the enforcement of any and all rights, duties, liabilities, obligations, powers, and other relations between the parties arising under this Agreement.

6.2 Successors and Assigns. Except as otherwise provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

6.3 Notices, Etc. All notices and other communications required or permitted hereunder, shall be in writing and shall be sent by facsimile personally delivered, mailed by registered or certified mail, postage prepaid, return receipt requested, or otherwise delivered by a nationally-recognized overnight courier, addressed (a) if to an Investor, at Investor's facsimile number or address as set forth in the records of the Company or (b) if to any other holder of any Eligible Securities, at such address as such holder shall have furnished the Company in writing, or, until any such holder so furnishes an address to the Company, then to and at the address of the last holder of such Eligible Securities who has so furnished an address or facsimile number to the Company, or (c) if to a Founder, at such Founder's facsimile number or address set forth on EXHIBIT B hereto, or a such other address as such Founder shall have furnished to the Company in writing, or (d) if to the Company, at its facsimile number or address set forth on the signature page hereto addressed to the attention of the Corporate Secretary, or at such other address as the Company

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shall have furnished to the Investors. Any such notice or communication shall be deemed to have been received (A) in the case of personal delivery, on the date of such delivery, (B) in the case of a nationally-recognized overnight courier, on the next business day after the date when sent, (C) in the case of mailing, on the third business day following that on which the piece of mail containing such communication is posted and (D) in the case of delivery via facsimile, one (1) business day after the date of transmission provided that said transmission is confirmed telephonically on the date of transmission.

6.4 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any holder of any Eligible Securities upon any breach or default of the Company under this Agreement shall impair any such right, power or remedy of such holder, nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any holder of any breach or default under this Agreement, or any waiver on the part of any holder of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing or as provided in this Agreement. All remedies, either under this Agreement or by law or otherwise afforded to any holder, shall be cumulative and not alternative.

6.5 Third Parties. Nothing in this Agreement, express or implied, is intended to confer upon any party, other than the parties hereto, and their respective successors and assigns, any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.6 Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, portions of such provisions, or such provisions in their entirety, to the extent necessary, shall be severed from this Agreement, and the balance of this Agreement shall be enforceable in accordance with its terms.

6.7 Amendment and Waiver. Any provision of this Agreement may be amended or waived with the written consent of the Company and the Holders of at least two-thirds of the outstanding shares of the Registrable Securities then held by Holders (assuming the exercise or conversion of all outstanding Eligible Securities); provided, however, (i) that in the event such amendment or waiver adversely affects the rights and/or obligations of the Founders under this Agreement in a different manner than the other Holders, such amendment or waiver shall also require written consent of the Founders holding a majority of the then outstanding Founders Shares, (ii) that in the event such amendment or waiver adversely affects the rights and/or obligations of Lehman, EuclidSR, Piper Jaffray, GE Capital, Interwest, Alliance, and BMSIF under Section 2.4 of this Agreement, such amendment or waiver shall not be effective as to Lehman, EuclidSR, Piper Jaffray, GE Capital, Interwest or BMSIF, as the case may be, without the written consent of such party, and (iii) that in the event such amendment or waiver adversely affects the rights and/or obligations of Warrantholders under this Agreement in a different manner than the other Holders, such amendment or waiver shall also require the written consent of Warrantholders holding a

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majority of the then outstanding Warrant Shares. Notwithstanding the foregoing, any purchaser of Series E Preferred Stock pursuant to the Purchase Agreement may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement and such purchaser shall be deemed a Holder and an Investor hereunder. The parties agree that Exhibit A shall be updated automatically without any formal amendment to reflect the addition of any such additional party. Any amendment or waiver effected in accordance with this paragraph shall be binding upon each Holder, the Founders, the holder of the Other Shares, Warrantholders and the Company. In addition, the Company may waive performance of any obligation owing to it, as to some or all of the Holders, or agree to accept alternatives to such performance, without obtaining the consent of any other Holder. In the event that an underwriting agreement is entered into between the Company and any Holder, and such underwriting agreement contains terms differing from this Agreement, as to any such Holder the terms of such underwriting agreement shall govern.

6.8 Rights of Holders. Each Holder shall have the absolute right to exercise or refrain from exercising any right or rights that such holder may have by reason of this Agreement, including, without limitation, the right to consent to the waiver or modification of any obligation under this Agreement, and such holder shall not incur any liability to any other holder of any Securities as a result of exercising or refraining from exercising any such right or rights.

6.9 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument.

6.10 Titles and Subtitles. The titles of the paragraphs and subparagraphs of this Agreement are for convenience of reference only and are not to be considered in construing this Agreement.

6.11 Amendment and Restatement of Prior Agreement. The undersigned Prior Investors who in the aggregate hold at least two-thirds of the outstanding Registrable Securities (as defined in the Prior Agreement) and the undersigned Founders hereby amend and restate the Prior Agreement pursuant to Section 6.7 thereof.

6.12 Waiver of Right of First Offer. The undersigned Prior Investors who in the aggregate hold at least two-thirds of the outstanding Registrable Securities (as defined in the Prior Agreement) hereby waive on behalf of all Prior Investors any rights of participation or notice under Section 3 of this Agreement and the Prior Agreement with respect to the securities sold pursuant to the Purchase Agreement. By its execution below, Lighthouse waives any right of participation or notice under Section 3 of this Agreement and Section 3 of the Prior Agreement with respect to securities sold under the Purchase Agreement.

6.13 Aggregation of Stock. All shares of Eligible Securities held or acquired by Affiliated entities or persons shall be aggregated together for the purpose of determining the availability of any rights under this Agreement.

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6.14 Jury Trial. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING (WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATED TO THIS AGREEMENT.

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FLUIDIGM CORPORATION
FORM OF
AMENDMENT NO. 1 TO
EIGHTH AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

THIS AMENDMENT NO. 1 (this "**Amendment**") to that certain Eighth Amended and Restated Investor Rights Agreement, dated as of June 13, 2006 (the "**Rights Agreement**"), by and among Fluidigm Corporation, a California corporation (the "**Company**"), and the Investors and Founders named therein is entered into this 22nd day of December, 2006 by and among the Company and the undersigned, collectively the Holders of at least two-thirds of the outstanding shares of the Registrable Securities then held by Holders (assuming the exercise or conversion of all outstanding Eligible Securities). Capitalized terms not defined herein have the meanings set forth in the Rights Agreement.

RECITALS

A. It is contemplated that the Company will sell and issue additional shares of the Company's Series E Preferred Stock ("**Series E Preferred Stock**") pursuant to that certain Series E Preferred Stock Purchase Agreement, dated as of June 13, 2006 (the "**Purchase Agreement**"), by and among the Company and the Purchasers named therein.

B. In connection with the sale of additional shares of Series E Preferred Stock, the Company and the Investors desire to (i) provide that the standoff agreement in Section 1.14 of the Rights Agreement shall not apply to securities of the Company purchased by certain Holders in the Initial Public Offering or in the public market for the Company's securities following the Initial Public Offering, and (ii) grant visitation rights pursuant to Section 2.4 of the Rights Agreement collectively to Cross Creek Capital, L.P., Cross Creek Capital Employees' Fund, L.P. and Wasatch Small Cap Growth.

C. The Company and the undersigned Holders of at least two-thirds of the outstanding shares of the Registrable Securities then held by Holders (assuming the exercise or conversion of all outstanding Eligible Securities) have agreed to amend the Rights Agreement to provide for the foregoing changes to the standoff agreement in Section 1.14 and the visitation rights in Section 2.4.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, all of the parties hereto mutually agree as follows:

SECTION 7 Amendment to Section 1.14. Section 1.14 (Standoff Agreement) of the Rights Agreement is hereby amended and restated in its entirety as follows:

"1.14 Standoff Agreement.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(a) Each Holder agrees in connection with the first sale of the Company's Common Stock in a firm commitment underwritten public offering pursuant to an effective registration statement under the Securities Act, upon notice by the Company or the underwriters managing such public offering, not to sell, make any short sale of, loan, pledge (or otherwise encumber or hypothecate), grant any option for the purchase of, or otherwise directly or indirectly dispose of any Securities (other than those included in the registration) without the prior written consent of the Company and such managing underwriters for such period of time as the Board of Directors establishes pursuant to its good faith negotiations with such managing underwriters; provided, however that:

(i) such agreement shall not exceed one hundred eighty (180) days;

(ii) such agreement shall not apply to transfers to an Affiliate, provided that such Affiliate agrees to be bound by the terms of such agreement, to the same extent as if such transferee were the original party thereunder;

(iii) such agreement shall not apply to securities of the Company purchased by AllianceBernstein Venture Fund I, L.P., SmallCap World Fund, Inc., Cross Creek Capital, L.P., Cross Creek Capital Employees' Fund, L.P. or Wasatch Small Cap Growth or their respective Affiliates in the Initial Public Offering or in the public market for the Company's securities following the Initial Public Offering;

(iv) a Holder shall not be subject to such agreement unless (A) all executive officers and directors of the Company, (B), all shareholders of the Company holding more than 1% of the Company's outstanding capital stock; and (C) all other Holders and holders of other registration rights, are subject to or obligated to enter into similar agreements; and

(v) if and when any person identified in clause (iv) is released, in whole or in part, from such agreement (whether or not such release is contemplated at the time of the offering) or if any such agreement is terminated, the Holder shall be concurrently released on a pro rata basis based on the number of shares held by such person and the Holder.

(b) Each Holder agrees that prior to the Initial Public Offering it will not transfer securities of the Company unless each transferee agrees in writing to be bound by all of the provisions of this Section 1.14; provided that this Section 1.14(b) shall not apply to transfers pursuant to a registration statement.

(c) Each Holder hereby consents to the placement of stop transfer orders with the Company's transfer agent in order to enforce the foregoing provision and agrees to execute a market standoff agreement with said

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underwriters in customary form consistent with the provisions of this Section 1.14.

SECTION 8 Amendment to Section 2.4. Section 2.4 (Visitation Rights) of the Rights Agreement is hereby amended and restated in its entirety as follows:

"2.4 Visitation Rights. One representative chosen collectively by LB I Group Inc., Lehman Brothers P.A. LLC, Lehman Brothers Partnership Account 2000/2001, L.P. and Lehman Brothers Offshore Partnership Account 2000/2001, L.P. (collectively, "**Lehman**"), one representative chosen collectively by EuclidSR Partners, L.P. and EuclidSR Biotechnology Partners, L.P. (collectively, "**EuclidSR**"), one representative chosen by Piper Jaffray Healthcare Fund III, L.P. ("**Piper Jaffray**"), one representative chosen by GE Capital Equity Investments, Inc. ("**GE Capital**"), one representative chosen collectively by Interwest Investors VII, L. P. and Interwest Partners VII, L.P. (collectively, "**Interwest**"), one representative chosen by AllianceBernstein Venture Fund I, L.P. ("**Alliance**"), one representative chosen collectively by Cross Creek Capital, L.P., Cross Creek Capital Employees' Fund, L.P. and Wasatch Small Cap Growth (collectively, "**Wasatch**"), and one representative chosen by BMSIF shall have the right to attend all meetings of the Board of Directors, including meetings of any committee of the Board and including the right to participate in any telephonic board meetings, so long as such Investor holds at least 750,000 shares of Eligible Securities (as adjusted for stock splits and combinations and the like). Said representative(s) shall be provided with notice of the meetings in the same manner at the same time as the members of the Board of Directors and shall be provided with any materials distributed to the Board of Directors in connection with board meetings. The foregoing visitation rights may be limited by the Board of Directors if (i), upon the advice of counsel, the Board of Directors determines that exclusion is required by third party confidentiality agreements, (ii) the Board is discussing engaging Investor or an affiliate of Investor as a financial advisor or underwriter; or (iii) the Board is discussing a material transaction with an entity in which Investor or a private equity fund affiliated with Investor is a 5% or greater shareholder, or (iv) the Board determines in good faith upon advice of counsel that limitations are required to maintain attorney-client privilege."

SECTION 9 Amendment to Section 6.7. Section 6.7 (Amendment and Waiver) of the Rights Agreement is hereby amended and restated in its entirety as follows:

"6.7 Amendment and Waiver. Any provision of this Agreement may be amended or waived with the written consent of the Company and the Holders of at least two-thirds of the outstanding shares of the Registrable Securities then held by Holders (assuming the exercise or conversion of all outstanding Eligible Securities); provided, however, (i) that in the event such amendment or waiver adversely affects the rights and/or obligations of the Founders under this Agreement in a different manner than the other Holders, such amendment or waiver shall also require written consent of the Founders holding a majority of the

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then outstanding Founders Shares, (ii) that in the event such amendment or waiver adversely affects the rights and/or obligations of Lehman, EuclidSR, Piper Jaffray, GE Capital, Interwest, Alliance, Wasatch or BMSIF under Section 2.4 of this Agreement, such amendment or waiver shall not be effective as to Lehman, EuclidSR, Piper Jaffray, GE Capital, Interwest, Alliance, Wasatch or BMSIF, as the case may be, without the written consent of such party, and (iii) that in the event such amendment or waiver adversely affects the rights and/or obligations of Warrantholders under this Agreement in a different manner than the other Holders, such amendment or waiver shall also require the written consent of Warrantholders holding a majority of the then outstanding Warrant Shares. Notwithstanding the foregoing, any purchaser of Series E Preferred Stock pursuant to the Purchase Agreement may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement and such purchaser shall be deemed a Holder and an Investor hereunder. The parties agree that Exhibit A shall be updated automatically without any formal amendment to reflect the addition of any such additional party. Any amendment or waiver effected in accordance with this paragraph shall be binding upon each Holder, the Founders, the holder of the Other Shares, Warrantholders and the Company. In addition, the Company may waive performance of any obligation owing to it, as to some or all of the Holders, or agree to accept alternatives to such performance, without obtaining the consent of any other Holder. In the event that an underwriting agreement is entered into between the Company and any Holder, and such underwriting agreement contains terms differing from this Agreement, as to any such Holder the terms of such underwriting agreement shall govern."

SECTION 10 Governing Law. This Amendment shall be construed in accordance with, and governed in all respects by, the laws of the State of California, as applied to agreements entered into, and to be performed entirely in such state, between residents of such state.

SECTION 11 Counterparts. This Amendment may be executed in any number of counterparts, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument.

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FLUIDIGM CORPORATION

AMENDMENT NO. 2 TO
EIGHTH AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

THIS AMENDMENT NO. 2 (this "**Amendment**") to that certain Eighth Amended and Restated Investor Rights Agreement, dated as of June 13, 2006, as amended December 22, 2006 (the "**Rights Agreement**"), by and among Fluidigm Corporation, a California corporation ("**Fluidigm California**"), and the Investors and Founders named therein is entered into effective as of October 10, 2007 by and among Fluidigm Corporation, a Delaware corporation (the "**Company**"), the undersigned Investors, and the undersigned Holders, collectively the Holders of at least two-thirds of the outstanding shares of the Registrable Securities held by Holders (assuming the exercise or conversion of all outstanding Eligible Securities). Capitalized terms not defined herein have the meanings set forth in the Rights Agreement.

RECITALS

WHEREAS, on July 18, 2007, Fluidigm California was merged with and into the Company, with the Company being the surviving corporation such that the Company succeeded to all of Fluidigm California's rights and obligations under the Rights Agreement;

WHEREAS, it is contemplated that the Company will sell and issue additional shares of the Company's Series E Preferred Stock ("**Series E Preferred Stock**") pursuant to that certain Series E Preferred Stock Purchase Agreement, dated as of June 13, 2006, as amended December 22, 2006 and further amended on the date hereof (the "**Purchase Agreement**"), by and among the Company and the Purchasers named therein;

WHEREAS, in connection with the sale of additional shares of Series E Preferred Stock, the Company and the Holders desire to amend the Rights Agreement to include the additional shares of Series E Preferred Stock to be issued pursuant to the Purchase Agreement and make certain other changes as set forth herein; and

WHEREAS, pursuant to Section 6.7 of the Rights Agreement, the Rights Agreement may be amended with the written consent of the Company and Holders of at least two-thirds of the outstanding shares of the Registrable Securities then held by Holders (assuming the exercise or conversion of all outstanding Eligible Securities) and the Company and the undersigned Holders have agreed to amend the Rights Agreement to provide for the foregoing changes.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, all of the parties hereto mutually agree as follows:

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AGREEMENT

SECTION 12 Amendment to Recital. The first Recital of the Rights Agreement is hereby amended and restated in its entirety as follows:

"WHEREAS, the Company and the New Investors have entered into a Series E Preferred Stock Purchase Agreement of even date herewith, as amended from time to time (such agreement, as amended from time to time, the "**Purchase Agreement**"), pursuant to which the Company shall sell, and the New Investors shall acquire, shares of the Company's Series E Preferred Stock;"

SECTION 13 Amendment to Section 1.14. Subsection (a)(i) of Section 1.14 (Standoff Agreement) of the Rights Agreement is hereby amended and restated in its entirety as follows:

"(i) such agreement shall not exceed one hundred and eighty (180) days (or such greater period, not to exceed 17 days, as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto);"

SECTION 14 Deletion of Section 1.15. The Rights Agreement is hereby amended to delete Section 1.15 (No Right to Delay Registration) in its entirety.

SECTION 15 Amendment to Section 2.4. Section 2.4 (Visitation Rights) of the Rights Agreement is hereby amended and restated in its entirety as follows:

"2.4 Visitation Rights. One representative chosen collectively by LB I Group Inc., Lehman Brothers P.A. LLC, Lehman Brothers Partnership Account 2000/2001, L.P. and Lehman Brothers Offshore Partnership Account 2000/2001, L.P. (collectively, "**Lehman**"), one representative chosen collectively by EuclidSR Partners, L.P. and EuclidSR Biotechnology Partners, L.P. (collectively, "**EuclidSR**"), one representative chosen by Piper Jaffray Healthcare Fund III, L.P. ("**Piper Jaffray**"), one representative chosen by GE Capital Equity Investments, Inc. ("**GE Capital**"), one representative chosen collectively by Interwest Investors VII, L. P. and Interwest Partners VII, L.P. (collectively, "**Interwest**"), one representative chosen by AllianceBernstein Venture Fund I, L.P. ("**Alliance**"), one representative chosen collectively by Cross Creek Capital, L.P., Cross Creek Capital Employees' Fund, L.P. and Wasatch Small Cap Growth (collectively, "**Wasatch**"), one representative chosen by BMSIF, and one representative chosen collectively by the holders of a majority of the Shares purchased under Amendment No. 2 to the Purchase Agreement (collectively, the "**October 2007 Representative**") shall have the right to attend all meetings of the Board of Directors, including meetings of any committee of the Board and including the right to participate in any telephonic board meetings, so long as such Investor or the October 2007 Representative holds at least 750,000 shares of Eligible Securities (as adjusted for stock

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splits and combinations and the like). Said representative(s) shall be provided with notice of the meetings in the same manner at the same time as the members of the Board of Directors and shall be provided with any materials distributed to the Board of Directors in connection with board meetings. The foregoing visitation rights may be limited by the Board of Directors if (i), upon the advice of counsel, the Board of Directors determines that exclusion is required by third party confidentiality agreements, (ii) the Board is discussing engaging Investor or an affiliate of Investor as a financial advisor or underwriter; or (iii) the Board is discussing a material transaction with an entity in which Investor or a private equity fund affiliated with Investor is a 5% or greater shareholder, or (iv) the Board determines in good faith upon advice of counsel that limitations are required to maintain attorney-client privilege."

SECTION 16 Amendment to Section 6.7. Section 6.7 (Amendment and Waiver) of the Rights Agreement is hereby amended and restated in its entirety as follows:

"6.7 Amendment and Waiver. Any provision of this Agreement may be amended or waived with the written consent of the Company and the Holders of at least two-thirds of the outstanding shares of the Registrable Securities then held by Holders (assuming the exercise or conversion of all outstanding Eligible Securities); provided, however, (i) that in the event such amendment or waiver adversely affects the rights and/or obligations of the Founders under this Agreement in a different manner than the other Holders, such amendment or waiver shall also require written consent of the Founders holding a majority of the then outstanding Founders Shares, (ii) that in the event such amendment or waiver adversely affects the rights and/or obligations of Lehman, EuclidSR, Piper Jaffray, GE Capital, Interwest, Alliance, Wasatch, BMSIF or the October 2007 Representative under Section 2.4 of this Agreement, such amendment or waiver shall not be effective as to Lehman, EuclidSR, Piper Jaffray, GE Capital, Interwest, Alliance, Wasatch, BMSIF or the October 2007 Representative, as the case may be, without the written consent of such party, and (iii) that in the event such amendment or waiver adversely affects the rights and/or obligations of Warrantholders under this Agreement in a different manner than the other Holders, such amendment or waiver shall also require the written consent of Warrantholders holding a majority of the then outstanding Warrant Shares. Notwithstanding the foregoing, any purchaser of Series E Preferred Stock pursuant to the Purchase Agreement may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement and such purchaser shall be deemed a Holder and an Investor hereunder. The parties agree that Exhibit A shall be updated automatically without any formal amendment to reflect the addition of any such additional party. Any amendment or waiver effected in accordance with this paragraph shall be binding upon each Holder, the Founders, the holder of the Other Shares, Warrantholders and the Company. In addition, the Company may waive performance of any obligation owing to it, as to some or all of the Holders, or agree to accept alternatives to such performance, without obtaining the consent of any other Holder. In the event that an underwriting agreement is entered into between the Company and any Holder, and such underwriting agreement contains terms

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differing from this Agreement, as to any such Holder the terms of such underwriting agreement shall govern."

SECTION 17 Addition of Section 6.15. The Rights Agreement is hereby amended to add the following Section 6.15 which reads in its entirety as follows:

"6.15 Reincorporation. Each Investor and Founder acknowledges that the Company completed a reincorporation into the State of Delaware on July 18, 2007 and each Investor and Founder hereby consents to the assignment of this Agreement to Fluidigm Corporation, a Delaware corporation, effective as of July 18, 2007."

SECTION 18 Governing Law. This Amendment shall be construed in accordance with, and governed in all respects by, the laws of the State of California, as applied to agreements entered into, and to be performed entirely in such state, between residents of such state.

SECTION 19 Rights Agreement. Wherever necessary, all other terms of the Rights Agreement are hereby amended to be consistent with the terms of this Amendment. Except as specifically set forth herein, the Rights Agreement shall remain in full force and effect

SECTION 20 Counterparts. This Amendment may be executed in any number of counterparts, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument.

SECTION 21 Effect of Execution of Amendment by Investor. This Amendment, when executed and delivered by the Company and an Investor purchasing shares of Series E Preferred pursuant to the Purchase Agreement as contemplated in the Recitals, shall also constitute and shall be deemed a counterpart signature page to the Rights Agreement. Consequently, each undersigned Investor purchasing shares of Series E Preferred acknowledges and agrees that he, she or it is bound by the terms and conditions contained in the Rights Agreement, as amended by this Amendment.

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[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

FOUNDERS

Gajus V. Worthington

Stephen R. Quake

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

INVESTORS

Alejandro Berenstein, M.D.

Alfred J. Mandel

Allan Johnson

Allen May, Trustee, Intervivos Trust Dated 5/14/91

AllianceBernstein Venture Fund I, L.P.

Alloy Partners 2002, L.P.

Alloy Ventures 2002, L.P.

Alloy Ventures 2005, L.P.

Analiza, Inc.

Athersys, Inc.

Beveren Company

Biomedical Sciences Investment Fund Pte Ltd

Bradford S. Goodwin and Cathy W. Goodwin As Trustees of the Goodwin Family Trust U/A/D 7/30/97

Bradford W. Baer

Bruce Burrows

Burr & Forman LLP

Burwen Family Trust U/D/T Dated 9/30/88

Charles C. Moore

Charles R. Engles

Clark-Boyd Family Trust

Cross Creek Capital Employees' Fund, L.P.

Cross Creek Capital, L.P.

David S. Frampton and Gaja Roberta Frampton, as Trustees of the Frampton Family Trust Dtd 4/25/03

Dwayne Hardy

Edward R. LeMoure

Erick Vanderburg

Erik T. Engelson, Trustee of the Elisabeth North Kuechler Engelson Trust UTA dated January 17, 2001

Erik T. Engelson, Trustee of the Erik T. Engelson Trust UTD dated March 29, 2000

EuclidSR Biotechnology Partners, L.P.

EuclidSR Partners, L.P.

Ferguson/Egan Family Trust Dated 6/28/99

Fidelity Contrafund: Fidelity Advisor New Insights Fund

Fidelity Contrafund: Fidelity Contrafund

Finnegan, Henderson, Farabow, Garrett & Dunner, LLP

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Frances H. Arnold

Fred St. Goar

Fredrick Stern

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Gary R. Bang

GE Capital Equity Investments, Inc.

General Electric Capital Corporation

George S. Taylor

Glaxo Group Limited

Health Care Administration Company

Heath Lukatch

Henry P. Massey, Jr. TTEE Massey Family Trust U/A DTD 7/06/88

Herbert L. Heyneker

Howard R. Engelson

Howard R. Engelson and Mariam T. Engelson, Ttees Engelson Fam Tr UA DTD 5/26/94

In-Q-Tel Employee Fund, LLC

In-Q-Tel, Inc.

Interwest Investors VII, L.P.

Interwest Partners VII, L.P.

Invus, L.P.

J.F. Shea Co., Inc. As Nominee 1999-114

Jacaranda Partners

James H. Eberwine

James W. Larrick, M.D.

John E. Strobeck, Ph.D., M.D.

John East

John M. Harland

Jonathan S. Hoot and Andrea T. Hoot, Trustees of the Hoot Family Revocable Trust DTD 3/16/99

Joseph M. Jacobson

Kenneth A. Clark

Kiley Revocable Trust

Kristin T. McClanahan Trust

Leerink Swann Co-Investment Fund, LLC

Leerink Swann Holdings, LLC

Lehman Brothers Healthcare Venture Capital L.P.

Lehman Brothers Offshore Partnership Account 2000/2001, L.P.

Lehman Brothers P.A. LLC

Lehman Brothers Partnership Account 2000/2001, L.P.

Leo J. Parry, Jr. and Roberta J. Parry TTEES Parry Family Revocable Trust DTD 01/22/97

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Lighthouse Capital Partners V, L.P.

Lilly Bio Ventures, Eli Lilly and Company

Markwell Partners

Matthew Collier

Matthew Frank

Michael H. McKay

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Michael J. Reardon Trust Agreement dated June 5, 1996

Needle & Rosenberg PC

Newman Family Investment Partnership

Oculus Pharmaceuticals, Inc.

Pamela East

Pat and Betsy Collins Revocable Trust

Patrick Tenney

Paul Machle

Pauline van Ysendoorn

Peter B. Dervan

Peter S. Heinecke

Rhett E. Brown

Robert D. McCulloch and Kathleen M. McCulloch, Trustee, or their successor(s)

Robert F. Kornegay, Jr. Revocable Trust u/d/t dated May 27, 2004, Robert F. Kornegay, Jr., Trustee

Security Trust Co., Custodian FBO Frank Ruderman IRA/RO

SightLine Healthcare Fund III, L.P.

Singapore Bio-Innovations Pte Ltd.

SMALLCAP World Fund, Inc.

SmithKline Beecham Corporation

Stanley D. Hayden, and his successor(s), as the Trustee of the Stanley D. Hayden Family Trust

Stephen J. Weiss

Stephen J. Weiss and Ursula G. Weiss, Trustees of the Weiss Family 1996 Trust

Stephen L. Parry

Technogen Liquidating Trust

The Condon Family Trust

The Heckmann Family Trust

The UAB Research Foundation

The V Foundation for Cancer Research

Thomas J. Parry

Thomas L. Barton

Tim L. Traff Trust

Timothy P. Lynch

TTC Fund I, LLC

Variable Insurance Products Fund II: Contrafund Portfolio

Versant Affiliates Fund 1-A, L.P.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Versant Affiliates Fund 1-B, L.P.

Versant Side Fund I, L.P.

Versant Venture Capital I, L.P.

Wasatch Funds, Inc.

William L. Caton III, M.D.

William L. Traff Trust

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

William S. Brown and Barbara G. Brown, or their successors, as Trustees of the Brown FRT DTD 3/10/99

WS Investment Company 2000B

WS Investment Company 99B

WS Investment Company, LLC (2001D)

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT E

FORM OF LEGAL OPINION

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

June , 2006

AllianceBernstein L.P.
1345 Avenue of the Americas
New York, New York 10105

Ladies and Gentlemen:

Reference is made to the Series E Preferred Stock Purchase Agreement dated as of June , 2006 (the "**Agreement**") by and among Fluidigm Corporation, a California corporation (the "**Company**"), and the persons and entities listed in Exhibit A to the Agreement (the "**Investors**"), which provides for the issuance by the Company to the Investors of shares of Series E Preferred Stock of the Company (the "**Shares**"). This opinion is rendered to the Investors in the Initial Closing pursuant to Section 4.5 of the Agreement, and all terms used herein have the meanings defined for them in the Agreement unless otherwise defined herein. Reference in this opinion to the Agreement excludes any schedule or substantive agreement attached as an exhibit to the Agreement, unless otherwise indicated herein.

We have acted as counsel for the Company in connection with the negotiation of the Agreement and the Investor Rights Agreement (collectively, the "**Transaction Documents**") and the issuance of the Shares. As such counsel, we have made such legal and factual examinations and inquiries as we have deemed advisable or necessary for the purpose of rendering this opinion. In addition, we have examined originals or copies of such corporate records of the Company, certificates of public officials and such other documents which we consider necessary or advisable for the purpose of rendering this opinion. In such examination we have assumed the genuineness of all signatures on original documents, the authenticity and completeness of all documents submitted to us as originals, the conformity to original documents of all copies submitted to us and the due execution and delivery of all documents (except as to due execution and delivery by the Company) where due execution and delivery are a prerequisite to the effectiveness thereof.

As used in this opinion, the expression "to our knowledge," "known to us" or similar language with reference to matters of fact refers to the current actual knowledge of attorneys of this firm who have worked on matters for the Company in connection with the Agreement and the transactions contemplated thereby. Except to the extent expressly set forth herein or as we otherwise believe to be necessary to our opinion, we have not undertaken any independent investigation to determine the existence or absence of any fact, and no inference as to our knowledge of the existence or absence of any fact should be drawn from our representation of the Company or the rendering of the opinion set forth below.

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For purposes of this opinion, we are assuming that each Investor has all requisite power and authority, and has taken any and all necessary corporate or partnership action, to execute and deliver the Transaction Documents and to effect any and all transactions related to or contemplated thereby. In addition, we are assuming that the Investors have purchased the Shares for value, in good faith and without notice of any adverse claims within the meaning of the California Uniform Commercial Code.

We are members of the Bar of the State of California and we express no opinion as to any matter relating to the laws of any jurisdiction other than the federal laws of the United States of America and the laws of the State of California.

In rendering the opinion in paragraph 6 below, we note that we have not conducted a docket search in any jurisdiction with respect to litigation that may be pending against the Company or any of its officers or directors. We further note the disclosure under Section 2.10 of the Schedule of Exceptions to the Agreement. Please be advised that we have not represented the Company with respect to the matters disclosed in Section 2.10 of the Schedule of Exceptions and express no opinion with respect to any matter discussed therein.

The opinions hereinafter expressed are subject to the following additional qualifications:

(a) We express no opinion as to the effect of applicable bankruptcy, insolvency, reorganization, moratorium or other similar federal or state laws affecting the rights of creditors.

(b) We express no opinion as to the effect or availability of rules of law governing specific performance, injunctive relief or other equitable remedies (regardless of whether any such remedy is considered in a proceeding at law or in equity).

(c) This opinion is qualified by the limitations imposed by statutes and principles of law and equity that provide that certain covenants and provisions of agreements are unenforceable where such covenants or provisions are unconscionable or contrary to public policy or where enforcement of such covenants or provisions under the circumstances would violate the enforcing party’s implied covenant of good faith and fair dealing.

(d) Our opinion in the first sentence of paragraph 1 below is based solely on the certificates of public officials and filing officers as to the corporate and tax good standing of the Company in the State of California.

(e) Our opinions set forth in paragraph 3 below relating to the outstanding capital stock of the Company and outstanding options, warrants or similar rights to acquire shares of the Company’s capital stock are based solely on (i) our review of a report from eProsper, Inc., the

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Company's transfer agent, detailing the holders of securities of the Company and the number and type of securities held by such holders (the "**Transfer Agent Report**") and (ii) a certificate delivered to us by the Company regarding factual matters underlying the opinions set forth herein. Our opinion in paragraph 3 below that the issued and outstanding shares of Common Stock and Preferred Stock of the Company are fully paid and non-assessable is based solely on a certificate of an officer of the Company that the Company received, in payment for such shares, the full consideration required by the resolutions of the Board of Directors of the Company authorizing the issuance of such shares.

(f) For purposes of our opinions in paragraph 2 and paragraph 4 below, we have assumed that the Transfer Agent Report is accurate and complete in all respects.

(g) We express no opinion as to compliance with the anti-fraud provisions of applicable securities laws.

(h) We express no opinion as to the enforceability of any indemnification or contribution provision, including, without limitation, the indemnification and contribution provisions of the Investor Rights Agreement and the indemnification provision in the Agreement, to the extent the provisions thereof may be subject to limitations of public policy and the effect of applicable statutes and judicial decisions.

(i) We express no opinion as to the enforceability of choice of law provisions, waivers of jury trial or provisions relating to venue or jurisdiction.

(j) We have made no inquiry into, and express no opinion with respect to, any federal or state statute, rule, or regulation relating to any tax, antitrust, land use, safety, environmental, hazardous material, patent, copyright, trademark or trade name matter, as to the statutes, regulations, treaties or common laws of any other nation (other than the United States), state or jurisdiction (other than the State of California), or the effect on the transactions contemplated in the Transaction Documents of noncompliance under any such statues, regulations, treaties, or common laws. Without limiting the foregoing, we express no opinion as to the effect of, or compliance with, the Investment Advisors Act of 1940, as amended, or the Employee Retirement Income Security Act of 1974, as amended. We further disclaim any opinion as to any statute, rule, regulation, ordinance, order, or other promulgation of any regional or local governmental body or as to any related judicial or administrative opinion.

(k) Our opinions relate solely to the express written provisions of the Transaction Documents, and we express no opinion as to any other oral or written agreements or understandings between the Company or any of the Investors.

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Based upon and subject to the foregoing, and except as set forth in the Schedule of Exceptions to the Agreement, we are of the opinion that:

1. The Company is a corporation duly incorporated and validly existing under, and by virtue of, the laws of the State of California and is in good standing under such laws. The Company has requisite corporate power to own and operate its properties and assets, and to carry on its business as presently conducted.

2. The Company has all requisite legal and corporate power to execute and deliver the Transaction Documents, to sell and issue the Shares under the Agreement, to issue the Common Stock issuable upon conversion of the Shares and to carry out and perform its obligations under the terms of the Transaction Documents.

3. The authorized capital stock of the Company consists of 77,857,144 shares of Common Stock, 9,274,356 shares of which are issued and outstanding, and 51,687,948 shares of Preferred Stock, 2,727,273 of which are designated Series A Preferred Stock, 2,727,273 shares of which are issued and outstanding, 6,460,675 of which are designated Series B Preferred Stock, 6,460,675 shares of which are issued and outstanding, 17,000,000 of which are designated Series C Preferred Stock, 16,364,832 shares of which are issued and outstanding, 15,500,000 shares of Series D Preferred Stock, 11,714,048 of which are issued and outstanding, and 10,000,000 shares of Series E Preferred Stock, none of which has been issued or outstanding immediately prior to the Initial Closing. All such issued and outstanding shares of Common Stock and Preferred Stock have been duly authorized and validly issued and are fully paid and nonassessable. The Company has reserved: (i) 5,000,000 shares of Series E Preferred Stock for issuance pursuant to the Agreement and 5,000,000 shares of Common Stock for issuance upon conversion of such shares of Series E Preferred Stock; (ii) 11,714,048 shares of Common Stock for issuance upon conversion of the Series D Preferred Stock, (iii) 916,335 shares of Series D Preferred Stock for issuance upon exercise of outstanding warrants and 916,335 shares of Common Stock for issuance upon conversion of such Series D Preferred Stock; (iv) 16,364,832 shares of Common Stock for issuance upon conversion of the Series C Preferred Stock; (v) 294,868 shares of Series C Preferred Stock for issuance upon exercise of outstanding warrants and 294,868 shares of Common Stock for issuance upon conversion of such Series C Preferred Stock; (vi) 6,460,675 shares of Common Stock for issuance upon conversion of the Series B Preferred Stock; (vii) 2,727,273 shares of Common Stock for issuance upon conversion of the Series A Preferred Stock; and (viii) an aggregate of 10,800,000 shares of Common Stock for issuance to employees and consultants of the Company pursuant to the Company's 1999 Stock Option Plan (the "**Option Plan**"), pursuant to which options to purchase 5,597,763 shares are granted and outstanding and 1,554,643 shares are available for future grant. The Common Stock issuable upon conversion of the Shares has been duly authorized and duly and validly reserved, and when issued in accordance with the Company's Articles of Incorporation, will

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be validly issued, fully paid and nonassessable. The Shares issued under the Agreement are duly authorized, validly issued, fully paid and nonassessable and are free of any liens, encumbrances and preemptive or similar rights contained in the Articles of Incorporation or Bylaws of the Company, or, to our knowledge, in any written agreement to which the Company is a party, except as specifically provided in the Agreement (including its Exhibits) and except for liens or encumbrances created by or imposed upon the Investors; provided, however, that the Shares (and the Common Stock issuable upon conversion thereof) are subject to restrictions on transfer under applicable state and federal securities laws. To our knowledge, except for rights described above, in the Transaction Documents (including the Schedule of Exceptions to the Agreement) or in the Articles of Incorporation of the Company, as of the date of the Agreement, there are no other options, warrants, conversion privileges or other rights in writing presently outstanding to purchase or otherwise acquire any authorized but unissued shares of capital stock or other securities of the Company, or any other written agreements of the Company to issue any such securities or rights; provided, however, we note the Company's intent to comply with Section 3 of the Investor Rights Agreement following the Initial Closing.

4. All corporate action on the part of the Company, its directors and shareholders necessary for the authorization, execution and delivery of the Transaction Documents by the Company, the authorization, sale, issuance and delivery of the Shares (and the Common Stock issuable upon conversion thereof) and the performance by the Company of its obligations under the Transaction Documents (other than those registration obligations contained in Section 1 of the Investor Rights Agreement) has been taken. The Transaction Documents have been duly and validly executed and delivered by the Company and constitute a valid and binding obligation of the Company, enforceable against the Company in accordance with their terms.

5. The execution and delivery by the Company of the Transaction Documents, the performance by the Company of its obligations under the Transaction Documents, and the issuance of the Shares (and the Common Stock issuable upon conversion thereof) do not violate any provision of the Articles of Incorporation or Bylaws, or any provision of any applicable federal or state law, rule or regulation known to us to be customarily applicable to transactions of this nature. The execution and delivery by the Company of the Transaction Documents, the performance by the Company of its obligations under the Transaction Documents, and the issuance of the Shares (and the Common Stock issuable upon conversion thereof) do not violate any judgment or decree known to us that is binding upon the Company.

6. Except as identified in the Agreement (including the Schedule of Exceptions), to our knowledge, there are no actions, suits, proceedings or investigations pending against the Company or its properties before any court or governmental agency nor, to our knowledge, has the Company received any written threat thereof.

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7. No consent, approval or authorization of or designation, declaration or filing with any governmental authority on the part of the Company is required in connection with the valid execution and delivery of the Transaction Documents, or the offer, sale or issuance of the Shares (and the Common Stock issuable upon conversion thereof) or the consummation by the Company of any other transaction contemplated by the Transaction Documents, except (a) the filing of the Amended and Restated Articles of Incorporation in the Office of the Secretary of State of the State of California, and (b) subject to the accuracy of the representations and warranties of the Investors in Section 3 of the Agreement, (i) the filing after the Closing of a Form D pursuant to Regulation D, promulgated by the United States Securities and Exchange Commission (the "**SEC**") under the Securities Act of 1933, as amended (the "**Securities Act**"), with the SEC, and (ii) the post-Closing qualification (or the taking of such action post-Closing as may be necessary to secure an exemption from qualification) under applicable state securities laws of the offer and sale of the Shares (and the Common Stock issuable upon conversion thereof). The filing referred to in clause (a) above has been accomplished and is effective. Our opinion herein is otherwise subject to the timely and proper completion of all filings and other actions contemplated herein where such filings and actions are to be undertaken on or after the date hereof.

8. Subject to the accuracy of the Investors' representations in Section 3 of the Agreement, the offer, sale and issuance of the Shares (and the Common Stock issuable upon conversion thereof) in conformity with the terms of the Agreement constitute transactions exempt from the registration requirements of Section 5 of the Securities Act.

This opinion is furnished to the Investors solely for their benefit in connection with the purchase of the Shares, and may not be relied upon by any other person or for any other purpose without our prior written consent. We assume no obligation to inform you of any facts, circumstances, events or changes in the law that may arise or be brought to our attention after the date of this opinion that may alter, affect or modify the opinions expressed herein.

Very truly yours,

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Exhibit 4.3

THIS WARRANT AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "*ACT*"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE, TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS. THIS WARRANT MUST BE SURRENDERED TO THE COMPANY OR ITS TRANSFER AGENT AS A CONDITION PRECEDENT TO THE SALE, TRANSFER, PLEDGE OR HYPOTHECATION OF ANY INTEREST IN ANY OF THE SECURITIES REPRESENTED HEREBY.

WARRANT TO PURCHASE SHARES OF PREFERRED STOCK
of
FLUIDIGM CORPORATION

Dated as of August 25, 2009
Void after the date specified in Section 8

No. PW-_____ **Warrant to Purchase Shares of Preferred Stock**

THIS CERTIFIES THAT, for value received, _____, or its registered assigns (the "***Holder***"), is entitled, subject to the provisions and upon the terms and conditions set forth herein, to purchase from Fluidigm Corporation, a Delaware corporation (the "***Company***"), Shares (as defined below), in the amounts, at such times and at the price per share set forth in Section 1. The term "***Warrant***" as used herein shall include this Warrant and any warrants delivered in substitution or exchange therefor as provided herein. This Warrant is issued in connection with the transactions described in the Note and Warrant Purchase Agreement, dated as of August 25, 2009, by and among the Company and the purchasers described therein (the "***Purchase Agreement***"). This Warrant is one of a series of warrants referred to as the "***Warrants***" in the Purchase Agreement.

The following is a statement of the rights of the Holder and the conditions to which this Warrant is subject, and to which Holder, by acceptance of this Warrant, agrees:

1. Number and Price of Shares; Exercise Period.

(a) ***Definition of Shares.*** "***Shares***" shall mean the class and series of preferred stock issued by the Company to investors in a Qualified Financing (as defined below) that occurs prior to the expiration of this Warrant, provided that, if a Qualified Financing does not occur on or prior to December 31, 2009 and the Notes are converted into preferred stock pursuant to Section 4(b) of the Notes, then "***Shares***" shall mean the preferred stock into which the Notes are converted. A "***Qualified Financing***" is a transaction or series of transactions pursuant to which the Company issues and sells shares of its preferred stock with the principal purpose of raising capital for aggregate gross proceeds of at least $20,000,000, which amount shall include (i) the aggregate principal amount of all subordinated convertible promissory notes issued pursuant to the Purchase Agreement and other indebtedness that is converted into such preferred stock or otherwise cancelled in consideration for the issuance of such preferred stock and (ii) any cash awards, cash grants, or other cash amounts received as advance payments in connection with strategic partnering transactions;

provided, *however*, that at least $5,000,000 of such aggregate gross proceeds shall consist of additional equity capital raised from new investors in the Company (which may include corporate investors).

(b) ***Number of Shares.*** Subject to any previous exercise of the Warrant, the Holder shall have the right to purchase up to the number of Shares that equals the quotient obtained by dividing (x) the sum of the Base Coverage (as defined below) and the Additional Coverage (as defined below) by (y) the Exercise Price (as defined below), prior to (or in connection with) the expiration of this Warrant as provided in Section 8.

(i) ***Definition of Base Coverage.*** "***Base Coverage***" shall mean fifty percent (50%) of the original principal amount of the Note.

(ii) ***Definition of Additional Coverage***. "***Additional Coverage***" shall mean an additional five percent (5%) of the original principal amount of the Note for each full month that elapses after the date that is two (2) months after the date of the Note, for so long as the outstanding principal amount and accrued interest under the Note has not been repaid in full or converted into equity securities of the Company pursuant to the terms of the Note; *provided*, *however*, that in no event shall the Additional Coverage exceed fifteen percent (15%) of the original principal amount of the Note.

(iii) ***Definition of Note.*** "***Note***" shall mean the subordinated convertible promissory note issued by the Company to the Holder on the date of this Warrant pursuant to the Purchase Agreement.

(c) ***Exercise Price.*** If, pursuant to Section 1(a), Shares means shares issued in a Qualified Financing, the exercise price per Share shall be equal to the price per share of the Shares issued in the Qualified Financing, subject to adjustment pursuant hereto. If, pursuant to Section 1(a), Shares means shares issued upon conversion of the Notes pursuant to Section 4(b) of the Notes, the exercise price per Share shall be equal to the price per share used in the conversion of the Notes, subject to adjustment pursuant hereto.

(d) ***Exercise Period.*** This Warrant shall be exercisable, in whole or in part, after the earlier of (i) the closing date of a Qualified Financing, or (ii) the conversion of the Notes pursuant to Section 4(b) of the Notes, until the expiration of this Warrant as set forth in Section 8.

2. Exercise of the Warrant.

(a) ***Exercise.*** The purchase rights represented by this Warrant may be exercised at the election of the Holder, in whole or in part, in accordance with Section 1, by:

(i) the tender to the Company at its principal office (or such other office or agency as the Company may designate) of a notice of exercise in the form of Exhibit A (the "***Notice of Exercise***"), duly completed and executed by or on behalf of the Holder, together with the surrender of this Warrant; and

(ii) the payment to the Company of an amount equal to (x) the Exercise Price multiplied by (y) the number of Shares being purchased, by wire transfer or certified, cashier's or other check acceptable to the Company and payable to the order of the Company.

(b) ***Net Issue Exercise.*** In lieu of exercising this Warrant pursuant to Section 2(a)(ii), if the fair market value of one Share is greater than the Exercise Price (at the date of calculation as set forth

below), the Holder may elect to receive a number of Shares equal to the value of this Warrant (or of any portion of this Warrant being canceled) by surrender of this Warrant at the principal office of the Company (or such other office or agency as the Company may designate) together with a properly completed and executed Notice of Exercise reflecting such election, in which event the Company shall issue to the Holder that number of Shares computed using the following formula:

$$X = \frac{Y(A - B)}{A}$$

Where:

X = The number of Shares to be issued to the Holder

Y = The number of Shares purchasable under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being canceled (at the date of such calculation)

A = The fair market value of one Share (at the date of such calculation)

B = The Exercise Price (as adjusted to the date of such calculation)

For purposes of the calculation above, the fair market value of one Share shall be determined by the Board of Directors of the Company, acting in good faith, which determination shall include consideration of the illiquidity of such Share; *provided, however,* that:

(i) if the securities are then traded on a national securities exchange or the NASDAQ Stock Market (or a similar national quotation system) at the time of such exercise, then the fair market value per Share shall be the product of (x) the average of the closing price of the common stock on such exchange or system over the ten (10) trading day period ending five (5) trading days prior to the date of determination of fair market value and (y) the number of shares of common stock into which each Share is convertible at the time of such exercise, as applicable;

(ii) if the securities are actively traded over-the-counter at the time of such exercise, then the fair market value per Share shall be the product of (x) the average of the closing bid prices of the common stock over the ten (10) trading day period ending five (5) trading days prior to the date of determination of fair market value and (y) the number of shares of common stock into which each Share is convertible at the time of such exercise, as applicable; or

(iii) if the Warrant is exercised in connection with the Company's initial public offering of common stock, the fair market value per Share shall be the product of (x) the per share offering price to the public of the Company's initial public offering and (y) the number of shares of common stock into which each Share is convertible at the time of such exercise, as applicable.

(c) ***Stock Certificates.*** The rights under this Warrant shall be deemed to have been exercised and the Shares issuable upon such exercise shall be deemed to have been issued immediately prior to the close of business on the date this Warrant is exercised in accordance with its terms, and the person entitled to receive the Shares issuable upon such exercise shall be treated for all purposes as the holder of record of such Shares as of the close of business on such date. As promptly as reasonably practicable on or after such date, the Company shall issue and deliver to the person or persons entitled to receive the same a

certificate or certificates for that number of shares issuable upon such exercise. In the event that the rights under this Warrant are exercised in part and have not expired, the Company shall execute and deliver a new Warrant reflecting the number of Shares that remain subject to this Warrant.

(d) ***No Fractional Shares or Scrip.*** No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the rights under this Warrant. In lieu of such fractional share to which the Holder would otherwise be entitled, the Company shall make a cash payment equal to the Exercise Price multiplied by such fraction.

(e) ***Automatic Exercise.*** If the Holder of this Warrant has not elected to exercise this Warrant prior to expiration of this Warrant pursuant to Section 8, then this Warrant shall automatically (without any act on the part of the Holder) be exercised pursuant to Section 2(b) effective immediately prior to the expiration of the Warrant to the extent such net issue exercise would result in the issuance of Shares, unless Holder shall earlier provide written notice to the Company that the Holder desires that this Warrant expire unexercised. If this Warrant is automatically exercised, the Company shall notify the Holder of the automatic exercise as soon as reasonably practicable, and the Holder shall surrender the Warrant to the Company in accordance with the terms hereof.

(f) ***Reservation of Stock.*** The Company agrees during the term the rights under this Warrant are exercisable to take all reasonable action to reserve and keep available from its authorized and unissued shares of preferred stock for the purpose of effecting the exercise of this Warrant such number of shares (and shares of common stock for issuance on conversion of such shares) as shall from time to time be sufficient to effect the exercise of the rights under this Warrant; and if at any time the number of authorized but unissued shares of preferred stock (and shares of common stock for issuance on conversion of such shares) shall not be sufficient for purposes of the exercise of this Warrant in accordance with its terms and the conversion of the Shares, without limitation of such other remedies as may be available to the Holder, the Company will use all reasonable efforts to take such corporate action as may, in the opinion of counsel, be necessary to increase its authorized and unissued shares of its preferred stock (and shares of common stock for issuance on conversion of such shares) to a number of shares as shall be sufficient for such purposes. The Company represents and warrants that all shares that may be issued upon the exercise of this Warrant will, when issued in accordance with the terms hereof, be validly issued, fully paid and nonassessable.

3. **Replacement of the Warrant.** Subject to the receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company at the expense of the Holder shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor and amount.

4. Transfer of the Warrant.

(a) ***Warrant Register.*** The Company shall maintain a register (the "***Warrant Register***") containing the name and address of the Holder or Holders. Until this Warrant is transferred on the Warrant Register in accordance herewith, the Company may treat the Holder as shown on the Warrant Register as the absolute owner of this Warrant for all purposes, notwithstanding any notice to the contrary. Any Holder of this Warrant (or of any portion of this Warrant) may change its address as shown on the Warrant Register by written notice to the Company requesting a change.

(b) ***Warrant Agent.*** The Company may appoint an agent for the purpose of maintaining the Warrant Register referred to in Section 4(a), issuing the Shares or other securities then issuable upon the

exercise of the rights under this Warrant, exchanging this Warrant, replacing this Warrant or conducting related activities.

(c) ***Transferability of the Warrant.*** Subject to the provisions of this Warrant with respect to compliance with the Securities Act of 1933, as amended (the "***Securities Act***") and limitations on assignments and transfers, including without limitation compliance with the restrictions on transfer set forth in Section 5, title to this Warrant may be transferred by endorsement (by the transferor and the transferee executing the assignment form attached as Exhibit B (the "***Assignment Form***")) and delivery in the same manner as a negotiable instrument transferable by endorsement and delivery.

(d) ***Exchange of the Warrant upon a Transfer.*** On surrender of this Warrant (and a properly endorsed Assignment Form) for exchange, subject to the provisions of this Warrant with respect to compliance with the Securities Act and limitations on assignments and transfers, the Company shall issue to or on the order of the Holder a new warrant or warrants of like tenor, in the name of the Holder or as the Holder (on payment by the Holder of any applicable transfer taxes) may direct, for the number of shares issuable upon exercise hereof, and the Company shall register any such transfer upon the Warrant Register. This Warrant (and the securities issuable upon exercise of the rights under this Warrant) must be surrendered to the Company or its warrant or transfer agent, as applicable, as a condition precedent to the sale, pledge, hypothecation or other transfer of any interest in any of the securities represented hereby.

(e) ***Taxes.*** In no event shall the Company be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of any certificate in a name other than that of the Holder, and the Company shall not be required to issue or deliver any such certificate unless and until the person or persons requesting the issue thereof shall have paid to the Company the amount of such tax or shall have established to the satisfaction of the Company that such tax has been paid or is not payable.

5. **Restrictions on Transfer of the Warrant and Shares; Compliance with Securities Laws.** By acceptance of this Warrant, the Holder agrees to comply with the following:

(a) ***Restrictions on Transfers.*** Any transfer of this Warrant or the Shares or the shares of common stock issuable upon conversion of the Shares (the "***Securities***") must be in compliance with all applicable federal and state securities laws. The Holder agrees not to make any sale, assignment, transfer, pledge or other disposition of all or any portion of the Securities, or any beneficial interest therein, unless and until the transferee thereof has agreed in writing for the benefit of the Company to take and hold such Securities subject to, and to be bound by, the terms and conditions set forth in this Warrant to the same extent as if the transferee were the original Holder hereunder.

(b) ***Investment Representation Statement.*** Unless the rights under this Warrant are exercised pursuant to an effective registration statement under the Securities Act that includes the Shares with respect to which the Warrant was exercised, it shall be a condition to any exercise of the rights under this Warrant that the Holder shall have confirmed to the satisfaction of the Company in writing, substantially in the form of Exhibit A-1, that the Shares so purchased are being acquired solely for the Holder's own account and not as a nominee for any other party, for investment and not with a view toward distribution or resale and that the Holder shall have confirmed such other matters related thereto as may be reasonably requested by the Company.

(c) ***Securities Law Legend.*** The Securities shall (unless otherwise permitted by the provisions of this Warrant) be stamped or imprinted with a legend substantially similar to the following (in addition to any legend required by state securities laws):

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF CERTAIN STATES. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS. THIS CERTIFICATE MUST BE SURRENDERED TO THE COMPANY OR ITS TRANSFER AGENT AS A CONDITION PRECEDENT TO THE SALE, TRANSFER, PLEDGE OR HYPOTHECATION OF ANY INTEREST IN ANY OF THE SECURITIES REPRESENTED HEREBY.

(d) ***Market Stand-off Legend.*** The Shares and common stock issued upon exercise hereof or conversion thereof shall also be stamped or imprinted with a legend in substantially the following form:

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE, INCLUDING A LOCK-UP PERIOD IN THE EVENT OF A PUBLIC OFFERING, AS SET FORTH IN THE WARRANT PURSUANT TO WHICH THESE SHARES WERE ISSUED, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE COMPANY.

(e) ***Instructions Regarding Transfer Restrictions.*** The Holder consents to the Company making a notation on its records and giving instructions to any transfer agent in order to implement the restrictions on transfer established in this Section 5.

(f) ***Removal of Legend.*** The legend referring to federal and state securities laws identified in Section 5(c) stamped on a certificate evidencing the Shares (and the common stock issuable upon conversion thereof) and the stock transfer instructions and record notations with respect to such securities shall be removed and the Company shall issue a certificate without such legend to the holder of such securities if (i) such securities are registered under the Securities Act, or (ii) such holder provides the Company with an opinion of counsel reasonably acceptable to the Company to the effect that a sale or transfer of such securities may be made without registration or qualification.

6. **Adjustments.** Subject to the expiration of this Warrant pursuant to Section 8, the number and kind of shares purchasable hereunder and the Exercise Price therefor are subject to adjustment from time to time, as follows:

(a) ***Merger or Reorganization.*** If at any time there shall be any reorganization, recapitalization, merger or consolidation (a "***Reorganization***") involving the Company (other than as otherwise provided for herein or as would cause the expiration of this Warrant under Section 8) in which shares of the Company's stock are converted into or exchanged for securities, cash or other property, then, as a part of such Reorganization, lawful provision shall be made so that the Holder shall thereafter be entitled to receive upon exercise of this Warrant, the kind and amount of securities, cash or other property of the successor corporation resulting from such Reorganization, equivalent in value to that which a holder of the Shares deliverable upon exercise of this Warrant would have been entitled in such Reorganization if the right to purchase the Shares hereunder had been exercised immediately prior to such Reorganization. In any such

case, appropriate adjustment (as determined in good faith by the Board of Directors of the successor corporation) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after such Reorganization to the end that the provisions of this Warrant shall be applicable after the event, as near as reasonably may be, in relation to any shares or other securities deliverable after that event upon the exercise of this Warrant.

(b) ***Reclassification of Shares.*** If the securities issuable upon exercise of this Warrant are changed into the same or a different number of securities of any other class or classes by reclassification, capital reorganization, conversion of all outstanding shares of the relevant class or series (other than as would cause the expiration of this Warrant pursuant to Section 8) or otherwise (other than as otherwise provided for herein) (a "***Reclassification***"), then, in any such event, in lieu of the number of Shares which the Holder would otherwise have been entitled to receive, the Holder shall have the right thereafter to exercise this Warrant for a number of shares of such other class or classes of stock that a holder of the number of securities deliverable upon exercise of this Warrant immediately before that change would have been entitled to receive in such Reclassification, all subject to further adjustment as provided herein with respect to such other shares.

(c) ***Subdivisions and Combinations.*** In the event that the outstanding shares of the securities issuable upon exercise of this Warrant are subdivided (by stock split, by payment of a stock dividend or otherwise) into a greater number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately increased, and the Exercise Price shall be proportionately decreased, and in the event that the outstanding shares of the securities issuable upon exercise of this Warrant are combined (by reclassification or otherwise) into a lesser number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately decreased, and the Exercise Price shall be proportionately increased.

(d) ***Redemption.*** In the event that all of the outstanding shares of the securities issuable upon exercise of this Warrant are redeemed in accordance with the Company's certificate of incorporation, this Warrant shall thereafter be exercisable for a number of shares of the Company's common stock equal to the number of shares of common stock that would have been received if this Warrant had been exercised in full immediately prior to such redemption and the preferred stock received thereupon had been simultaneously converted into common stock.

(e) ***Notice of Adjustments.*** Upon any adjustment in accordance with this Section 6, the Company shall give notice thereof to the Holder, which notice shall state the event giving rise to the adjustment, the Exercise Price as adjusted and the number of securities or other property purchasable upon the exercise of the rights under this Warrant, setting forth in reasonable detail the method of calculation of each. The Company shall, upon the written request of any Holder, furnish or cause to be furnished to such Holder a certificate setting forth (i) such adjustments, (ii) the Exercise Price at the time in effect and (iii) the number of securities and the amount, if any, of other property that at the time would be received upon exercise of this Warrant.

7. **Notification of Certain Events.** Prior to the expiration of this Warrant pursuant to Section 8, in the event that the Company shall authorize:

(a) the issuance of any dividend or other distribution on the capital stock of the Company (other than (i) dividends or distributions otherwise provided for in Section 6, (ii) repurchases of common stock issued to or held by employees, officers, directors or consultants of the Company or its

subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase; (iii) repurchases of common stock issued to or held by employees, officers, directors or consultants of the Company or its subsidiaries pursuant to rights of first refusal or first offer contained in agreements providing for such rights; or (iv) repurchases of capital stock of the Company in connection with the settlement of disputes with any stockholder), whether in cash, property, stock or other securities;

(b) the voluntary liquidation, dissolution or winding up of the Company; or

(c) any transaction resulting in the expiration of this Warrant pursuant to Section 8(b) or 8(c);

the Company shall send to the Holder of this Warrant at least ten (10) days prior written notice of the date on which a record shall be taken for any such dividend or distribution specified in clause (a) or the expected effective date of any such other event specified in clause (b) or (c), as applicable. The notice provisions set forth in this section may be shortened or waived prospectively or retrospectively by the consent of the holders of a majority of the Shares issuable upon exercise of the rights under the Warrants.

8. **Expiration of the Warrant.** This Warrant shall expire and shall no longer be exercisable as of the earlier of:

(a) 5:00 p.m., Pacific time, on August 25, 2019;

(b) (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any merger effected exclusively for the purpose of changing the domicile of the Company) other than a transaction or series of transactions in which the holders of the voting securities of the Company outstanding immediately prior to such transaction or series of transactions continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Company held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, transfer, lease or other conveyance of all or substantially all of the assets of the Company; or

(c) immediately prior to the closing of a firm commitment underwritten initial public offering on Form S-1 (or successor form) filed under the Securities Act covering the offer and sale of the Company's common stock; *provided*, *however*, that all outstanding shares of Preferred Stock of the Company shall convert either automatically or though stockholder consent or vote, into shares of Common Stock in connection with such initial public offering.

9. **No Rights as a Stockholder.** Nothing contained herein shall entitle the Holder to any rights as a stockholder of the Company or to be deemed the holder of any securities that may at any time be issuable on the exercise of the rights hereunder for any purpose nor shall anything contained herein be construed to confer upon the Holder, as such, any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value or change of stock to no par value, consolidation, merger, conveyance or otherwise) or to receive notice of meetings, or to receive dividends or subscription rights or any other rights of a stockholder of the Company until the rights under the Warrant shall have been exercised and the Shares purchasable upon exercise of the rights hereunder shall have become deliverable as provided herein.

10. **Market Stand-off.** The Holder of this Warrant hereby agrees that such Holder shall not sell or otherwise transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, of any common stock (or other securities) of the Company held by the Holder (other than those included in the registration) during the one hundred eighty (180) day period following the effective date of the registration statement for the Company's initial public offering filed under the Securities Act (or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The obligations described in this section shall not apply to a registration relating solely to employee benefit plans on Form S-l or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions and may stamp each certificate with a legend as substantially set forth in Section 5(d) with respect to the shares of common stock (or other securities) subject to the foregoing restriction until the end of such one hundred eighty (180) day (or other) period. The Holder agrees to execute a market stand-off agreement with the underwriters in the offering in customary form consistent with the provisions of this section.

11. **Representations and Warranties of the Holder.** By acceptance of this Warrant, the Holder represents and warrants to the Company as follows:

(a) ***No Registration.*** The Holder understands that the Securities have not been, and will not be, registered under the Securities Act by reason of a specific exemption from the registration provisions of the Securities Act, the availability of which depends upon, among other things, the *bona fide* nature of the investment intent and the accuracy of the Holder's representations as expressed herein or otherwise made pursuant hereto.

(b) ***Investment Intent.*** The Holder is acquiring the Securities for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, any distribution thereof. The Holder has no present intention of selling, granting any participation in, or otherwise distributing the Securities, nor does it have any contract, undertaking, agreement or arrangement for the same.

(c) ***Investment Experience.*** The Holder has substantial experience in evaluating and investing in private placement transactions of securities in companies similar to the Company, and has such knowledge and experience in financial or business matters so that it is capable of evaluating the merits and risks of its investment in the Company and protecting its own interests.

(d) ***Speculative Nature of Investment.*** The Holder understands and acknowledges that its investment in the Company is highly speculative and involves substantial risks. The Holder can bear the economic risk of its investment and is able, without impairing its financial condition, to hold the Securities for an indefinite period of time and to suffer a complete loss of its investment.

(e) ***Access to Data.*** The Holder has had an opportunity to ask questions of officers of the Company, which questions were answered to its satisfaction. The Holder believes that it has received all the information that it considers necessary or appropriate for deciding whether to acquire the Securities. The Holder understands that any such discussions, as well as any information issued by the Company, were intended to describe certain aspects of the Company's business and prospects, but were not necessarily a thorough or exhaustive description. The Holder acknowledges that any business plans prepared by the Company have been, and continue to be, subject to change and that any projections included in such business

plans or otherwise are necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying the projections will not materialize or will vary significantly from actual results.

(f) ***Accredited Investor.*** The Holder is an "accredited investor" within the meaning of Regulation D, Rule 501(a), promulgated by the Securities and Exchange Commission and agrees to submit to the Company such further assurances of such status as may be reasonably requested by the Company.

(g) ***Residency.*** The residency of the Holder (or, in the case of a partnership or corporation, such entity's principal place of business) is correctly set forth on the signature page hereto.

(h) ***Restrictions on Resales.*** The Holder acknowledges that the Securities must be held indefinitely unless subsequently registered under the Securities Act or an exemption from such registration is available. The Holder is aware of the provisions of Rule 144 promulgated under the Securities Act, which permit resale of shares purchased in a private placement subject to the satisfaction of certain conditions, which may include, among other things, the availability of certain current public information about the Company; the resale occurring not less than a specified period after a party has purchased and paid for the security to be sold; the number of shares being sold during any three-month period not exceeding specified limitations; the sale being effected through a "broker's transaction," a transaction directly with a "market maker" or a "riskless principal transaction" (as those terms are defined in the Securities Act or the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder); and the filing of a Form 144 notice, if applicable. The Holder acknowledges and understands that the Company may not be satisfying the current public information requirement of Rule 144 at the time the Holder wishes to sell the Securities and that, in such event, the Holder may be precluded from selling the Securities under Rule 144 even if the other applicable requirements of Rule 144 have been satisfied. The Holder acknowledges that, in the event the applicable requirements of Rule 144 are not met, registration under the Securities Act or an exemption from registration will be required for any disposition of the Securities. The Holder understands that, although Rule 144 is not exclusive, the Securities and Exchange Commission has expressed its opinion that persons proposing to sell restricted securities received in a private offering other than in a registered offering or pursuant to Rule 144 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales and that such persons and the brokers who participate in the transactions do so at their own risk.

(i) ***No Public Market.*** The Holder understands and acknowledges that no public market now exists for any of the securities issued by the Company and that the Company has made no assurances that a public market will ever exist for the Company's securities.

(j) ***Brokers and Finders.*** The Holder has not engaged any brokers, finders or agents in connection with the Securities, and the Company has not incurred nor will incur, directly or indirectly, as a result of any action taken by the Holder, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with the Securities.

(k) ***Legal Counsel.*** The Holder has had the opportunity to review this Warrant, the exhibits and schedules attached hereto and the transactions contemplated by this Warrant with its own legal counsel. The Holder is not relying on any statements or representations of the Company or its agents for legal advice with respect to this investment or the transactions contemplated by this Warrant.

(l) ***Tax Advisors.*** The Holder has reviewed with its own tax advisors the U.S. federal, state and local and non-U.S. tax consequences of this investment and the transactions contemplated by this Warrant. With respect to such matters, the Holder relies solely on any such advisors and not on any statements or representations of the Company or any of its agents, written or oral. The Holder understands

that it (and not the Company) shall be responsible for its own tax liability that may arise as a result of this investment and the transactions contemplated by this Warrant.

12. **Miscellaneous.**

(a) ***Amendments.*** Except as expressly provided herein, neither this Warrant nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument referencing this Warrant and signed by the Company and the holders of warrants representing not less than a majority of the Shares issuable upon exercise of any and all outstanding Warrants, which majority does not need to include the consent of the Holder. Any amendment, waiver, discharge or termination effected in accordance with this Section 12(a) shall be binding upon each holder of the Warrants, each future holder of such Warrants and the Company; *provided, however,* that no special consideration or inducement may be given to any such holder in connection with such consent that is not given ratably to all such holders, and that such amendment must apply to all such holders equally and ratably in accordance with the number of shares of the Company's preferred stock issuable upon exercise of the Warrants. The Company shall promptly give notice to all holders of Warrants of any amendment effected in accordance with this Section 12(a).

(b) ***Waivers.*** No waiver of any single breach or default shall be deemed a waiver of any other breach or default theretofore or thereafter occurring.

(c) ***Notices.*** All notices and other communications required or permitted hereunder shall be in writing and shall be mailed by registered or certified mail, postage prepaid, sent by facsimile or electronic mail (if to the Holder) or otherwise delivered by hand, messenger or courier service addressed:

(i) if to the Holder, to the Holder at the Holder's address, facsimile number or electronic mail address as shown in the Company's records, as may be updated in accordance with the provisions hereof, or until any such Holder so furnishes an address, facsimile number or electronic mail address to the Company, then to and at the address, facsimile number or electronic mail address of the last holder of this Warrant for which the Company has contact information in its records; or

(ii) if to the Company, to the attention of the President or Chief Financial Officer of the Company at the Company's address as shown on the signature page hereto, or at such other address as the Company shall have furnished to the Holder, with a copy to Robert F. Kornegay, Wilson Sonsini Goodrich & Rosati, P.C., 650 Page Mill Road, Palo Alto, California 94304.

Each such notice or other communication shall for all purposes of this Warrant be treated as effective or having been given (i) if delivered by hand, messenger or courier service, when delivered, or (ii) if sent by mail, at the earlier of its receipt or 72 hours after the same has been deposited in a regularly maintained receptacle for the deposit of the United States mail, addressed and mailed as aforesaid, or (iii) if sent by facsimile, upon confirmation of facsimile transfer or, if sent by electronic mail, upon confirmation of delivery when directed to the relevant electronic mail address. In the event of any conflict between the Company's books and records and this Warrant or any notice delivered hereunder, the Company's books and records will control absent fraud or error.

(d) ***Governing Law.*** This Warrant and all actions arising out of or in connection with this Warrant shall be governed by and construed in accordance with the laws of the State of California, without regard to the conflicts of law provisions of the State of California, or of any other state.

(e) ***Jurisdiction and Venue.*** Each of the Holder and the Company irrevocably consents to the exclusive jurisdiction and venue of any court within Santa Clara County, State of California, in

connection with any matter based upon or arising out of this Warrant or the matters contemplated herein, and agrees that process may be served upon them in any manner authorized by the laws of the State of California for such persons.

(f) ***Titles and Subtitles.*** The titles and subtitles used in this Warrant are used for convenience only and are not to be considered in construing or interpreting this Warrant. All references in this Warrant to sections, paragraphs and exhibits shall, unless otherwise provided, refer to sections and paragraphs hereof and exhibits attached hereto.

(g) ***Severability.*** If any provision of this Warrant becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, portions of such provision, or such provision in its entirety, to the extent necessary, shall be severed from this Warrant, and such illegal, unenforceable or void provision shall be replaced with a valid and enforceable provision that will achieve, to the extent possible, the same economic, business and other purposes of the illegal, unenforceable or void provision. The balance of this Warrant shall be enforceable in accordance with its terms.

(h) ***Waiver of Jury Trial.*** **EACH OF THE HOLDER AND THE COMPANY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATED TO THIS WARRANT.** If the waiver of jury trial set forth in this paragraph is not enforceable, then any claim or cause of action arising out of or relating to this Warrant shall be settled by judicial reference pursuant to California Code of Civil Procedure Section 638 *et seq.* before a referee sitting without a jury, such referee to be mutually acceptable to the parties or, if no agreement is reached, by a referee appointed by the Presiding Judge of the California Superior Court for Santa Clara County. This paragraph shall not restrict the Holder or the Company from exercising remedies under the Uniform Commercial Code or from exercising pre-judgment remedies under applicable law.

(i) ***California Corporate Securities Law.*** THE SALE OF THE SECURITIES THAT ARE THE SUBJECT OF THIS WARRANT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF SUCH SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO SUCH QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM QUALIFICATION BY SECTION 25100, 25102, OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS WARRANT ARE EXPRESSLY CONDITIONED UPON THE QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.

(j) ***Saturdays, Sundays and Holidays.*** If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday, Sunday or U.S. federal holiday, then such action may be taken or such right may be exercised on the next succeeding day that is not a Saturday, Sunday or U.S. federal holiday.

(k) ***Rights and Obligations Survive Exercise of the Warrant.*** Except as otherwise provided herein, the rights and obligations of the Company and the Holder under this Warrant shall survive exercise of this Warrant.

(l) ***Entire Agreement.*** Except as expressly set forth herein, this Warrant (including the exhibits attached hereto) constitutes the entire agreement and understanding of the Company and the Holder with respect to the subject matter hereof and supersede all prior agreements and understandings relating to the subject matter hereof.

* * * * *

The Company and the Holder sign this Warrant as of the date stated on the first page.

FLUIDIGM CORPORATION,
a Delaware corporation

By: _____
Gajus V. Worthington,
President and Chief Executive Officer

Address:

7000 Shoreline Court, Suite 100
South San Francisco, CA 94080

AGREED AND ACKNOWLEDGED,

[_____]

By: _____

Name: _____

Title: _____

Address:

_____

_____

_____

Fax number: _____

Email address: _____

EXHIBIT A

NOTICE OF EXERCISE

To: **Fluidigm Corporation, a Delaware corporation (the "*Company*")**

Attention: **President**

(1) **Exercise.** The undersigned elects to purchase the following pursuant to the terms of the attached warrant:

Number of shares: _____

Type of security: _____

(2) **Method of Exercise.** The undersigned elects to exercise the attached warrant pursuant to:

☐ A cash payment and tenders herewith payment of the purchase price for such shares in full, together with all applicable transfer taxes, if any.

☐ The net issue exercise provisions of Section 2(b) of the attached warrant.

(3) **Stock Certificate.** Please issue a certificate or certificates representing the shares in the name of:

☐ The undersigned

☐ Other—Name: _____

Address: _____

_____

(4) **Unexercised Portion of the Warrant.** Please issue a new warrant for the unexercised portion of the attached warrant in the name of:

☐ The undersigned

☐ Other—Name: _____

Address: _____

_____

☐ Not applicable

(5) **Investment Intent.** The undersigned represents and warrants that the aforesaid shares are being acquired for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof, and that the undersigned has no present intention of selling, granting any participation in, or otherwise distributing the shares, nor does it have any contract, undertaking, agreement or arrangement for the same, and all representations and warranties

of the undersigned set forth in Section 11 of the attached warrant are true and correct as of the date hereof.

(6) **Investment Representation Statement and Market Stand-Off Agreement.** The undersigned has executed, and delivers herewith, an Investment Representation Statement and Market Stand-Off Agreement in a form substantially similar to the form attached to the warrant as Exhibit A-1.

(7) **Consent to Receipt of Electronic Notice.** Subject to the limitations set forth in Delaware General Corporation Law §232(e), the undersigned consents to the delivery of any notice to stockholders given by the Company under the Delaware General Corporation Law or the Company's certificate of incorporation or bylaws by (i) facsimile telecommunication to the facsimile number provided below (or to any other facsimile number for the undersigned in the Company's records), (ii) electronic mail to the electronic mail address provided below (or to any other electronic mail address for the undersigned in the Company's records), (iii) posting on an electronic network together with separate notice to the undersigned of such specific posting or (iv) any other form of electronic transmission (as defined in the Delaware General Corporation Law) directed to the undersigned. This consent may be revoked by the undersigned by written notice to the Company and may be deemed revoked in the circumstances specified in Delaware General Corporation Law §232.

_____

(*Print name of the warrant holder*)

_____

(*Signature*)

_____

(*Name and title of signatory, if applicable*)

_____

(*Date*)

_____

(*Fax number*)

_____

(*Email address*)

[*Signature Page to Notice of Exercise*]

EXHIBIT A-l

INVESTMENT REPRESENTATION STATEMENT
AND
MARKET STAND-OFF AGREEMENT

INVESTOR: _____

COMPANY: FLUIDIGM CORPORATION, A DELAWARE CORPORATION

SECURITIES: THE WARRANT ISSUED ON AUGUST 25, 2009 (THE "***WARRANT***") AND THE SECURITIES ISSUED OR ISSUABLE UPON EXERCISE THEREOF (INCLUDING UPON SUBSEQUENT CONVERSION OF THOSE SECURITIES)

DATE: _____

In connection with the purchase or acquisition of the above-listed Securities, the undersigned Investor represents and warrants to, and agrees with, the Company as follows:

1. **No Registration.** The Investor understands that the Securities have not been, and will not be, registered under the Securities Act of 1933, as amended (the "***Securities Act***"), by reason of a specific exemption from the registration provisions of the Securities Act, the availability of which depends upon, among other things, the *bona fide* nature of the investment intent and the accuracy of the Investor's representations as expressed herein or otherwise made pursuant hereto.

2. **Investment Intent.** The Investor is acquiring the Securities for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, any distribution thereof. The Investor has no present intention of selling, granting any participation in, or otherwise distributing the Securities, nor does it have any contract, undertaking, agreement or arrangement for the same.

3. **Investment Experience.** The Investor has substantial experience in evaluating and investing in private placement transactions of securities in companies similar to the Company, and has such knowledge and experience in financial or business matters so that it is capable of evaluating the merits and risks of its investment in the Company and protecting its own interests.

4. **Speculative Nature of Investment.** The Investor understands and acknowledges that its investment in the Company is highly speculative and involves substantial risks. The Investor can bear the economic risk of its investment and is able, without impairing its financial condition, to hold the Securities for an indefinite period of time and to suffer a complete loss of its investment.

5. **Access to Data.** The Investor has had an opportunity to ask questions of officers of the Company, which questions were answered to its satisfaction. The Investor believes that it has received all the information that it considers necessary or appropriate for deciding whether to acquire the Securities. The Investor understands that any such discussions, as well as any information issued by the Company, were intended to describe certain aspects of the Company's business and prospects, but were not necessarily a thorough or exhaustive description. The Investor acknowledges that any business plans prepared by the Company have been, and continue to be, subject to change and that any projections included in such business

plans or otherwise are necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying the projections will not materialize or will vary significantly from actual results.

6. **Accredited Investor.** The Investor is an "accredited investor" within the meaning of Regulation D, Rule 501(a), promulgated by the Securities and Exchange Commission and agrees to submit to the Company such further assurances of such status as may be reasonably requested by the Company.

7. **Residency.** The residency of the Investor (or, in the case of a partnership or corporation, such entity's principal place of business) is correctly set forth on the signature page hereto.

8. **Restrictions on Resales.** The Investor acknowledges that the Securities must be held indefinitely unless subsequently registered under the Securities Act or an exemption from such registration is available. The Investor is aware of the provisions of Rule 144 promulgated under the Securities Act, which permit resale of shares purchased in a private placement subject to the satisfaction of certain conditions, which may include, among other things, the availability of certain current public information about the Company; the resale occurring not less than a specified period after a party has purchased and paid for the security to be sold; the number of shares being sold during any three-month period not exceeding specified limitations; the sale being effected through a "broker's transaction," a transaction directly with a "market maker" or a "riskless principal transaction" (as those terms are defined in the Securities Act or the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder); and the filing of a Form 144 notice, if applicable. The Investor acknowledges and understands that the Company may not be satisfying the current public information requirement of Rule 144 at the time the Investor wishes to sell the Securities and that, in such event, the Investor may be precluded from selling the Securities under Rule 144 even if the other applicable requirements of Rule 144 have been satisfied. The Investor acknowledges that, in the event the applicable requirements of Rule 144 are not met, registration under the Securities Act or an exemption from registration will be required for any disposition of the Securities. The Investor understands that, although Rule 144 is not exclusive, the Securities and Exchange Commission has expressed its opinion that persons proposing to sell restricted securities received in a private offering other than in a registered offering or pursuant to Rule 144 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales and that such persons and the brokers who participate in the transactions do so at their own risk.

9. **No Public Market.** The Investor understands and acknowledges that no public market now exists for any of the securities issued by the Company and that the Company has made no assurances that a public market will ever exist for the Company's securities.

10. **Brokers and Finders.** The Investor has not engaged any brokers, finders or agents in connection with the Securities, and the Company has not incurred nor will incur, directly or indirectly, as a result of any action taken by the Investor, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with the Securities.

11. **Legal Counsel.** The Investor has had the opportunity to review the Warrant, the exhibits and schedules attached thereto and the transactions contemplated by the Warrant with its own legal counsel. The Investor is not relying on any statements or representations of the Company or its agents for legal advice with respect to this investment or the transactions contemplated by the Warrant.

12. **Tax Advisors.** The Investor has reviewed with its own tax advisors the U.S. federal, state and local and non-U.S. tax consequences of this investment and the transactions contemplated by the Warrant. With respect to such matters, the Investor relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. The Investor understands that it (and

not the Company) shall be responsible for its own tax liability that may arise as a result of this investment or the transactions contemplated by the Warrant.

13. **Market Stand-off.** The Investor hereby agrees that the Investor shall not sell or otherwise transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, of any common stock (or other securities) of the Company held by the Investor (other than those included in the registration) during the one hundred eighty (180) day period following the effective date of the registration statement for the Company's initial public offering filed under the Securities Act (or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The obligations described in this section shall not apply to a registration relating solely to employee benefit plans on Form S-l or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions and may stamp each certificate with a legend as substantially set forth in Section 5(e) with respect to the shares of common stock (or other securities) subject to the foregoing restriction until the end of such one hundred eighty (180) day (or other) period. The Investor agrees to execute a market stand-off agreement with the underwriters in the offering in customary form consistent with the provisions of this section.

* * * * *

The Investor is signing this Investment Representation Statement and Market Stand-Off Agreement on the date first written above.

INVESTOR

_____

(Print name of the investor)

_____

(Signature)

_____

(Name and title of signatory, if applicable)

_____

(Street address)

_____

(City, state and ZIP)

EXHIBIT B

ASSIGNMENT FORM

ASSIGNOR: _____

COMPANY: FLUIDIGM CORPORATION, A DELAWARE CORPORATION

WARRANT: THE WARRANT TO PURCHASE SHARES OF PREFERRED STOCK ISSUED ON AUGUST 25, 2009 (THE "***WARRANT***")

DATE: _____

(1) **Assignment.** The undersigned registered holder of the Warrant ("***Assignor***") assigns and transfers to the assignee named below ("***Assignee***") all of the rights of Assignor under the Warrant, with respect to the number of shares set forth below:

Name of Assignee: _____

Address of Assignee: _____

_____

Number of Shares Assigned: _____

and does irrevocably constitute and appoint _____ as attorney to make such transfer on the books of Fluidigm Corporation, maintained for the purpose, with full power of substitution in the premises.

(2) **Obligations of Assignee.** Assignee agrees to take and hold the Warrant and any shares of stock to be issued upon exercise of the rights thereunder (and any shares issuable upon conversion thereof) (the "***Securities***") subject to, and to be bound by, the terms and conditions set forth in the Warrant to the same extent as if Assignee were the original holder thereof.

(3) **Investment Intent.** Assignee represents and warrants that the Securities are being acquired for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof, and that Assignee has no present intention of selling, granting any participation in, or otherwise distributing the shares, nor does it have any contract, undertaking, agreement or arrangement for the same, and all representations and warranties set forth in Section 11 of the Warrant are true and correct as to Assignee as of the date hereof.

(4) **Investment Representation Statement and Market Stand-Off Agreement.** Assignee has executed, and delivers herewith, an Investment Representation Statement and Market Stand-Off Agreement in a form substantially similar to the form attached to the Warrant as Exhibit A-1.

Assignor and Assignee are signing this Assignment Form on the date first set forth above.

ASSIGNOR

_____
(Print name of Assignor)

_____
(Signature of Assignor)

_____
(Print name of signatory, if applicable)

_____
(Print title of signatory, if applicable)

Address:

_____

_____

ASSIGNEE

_____
(Print name of Assignee)

_____
(Signature of Assignee)

_____
(Print name of signatory, if applicable)

_____
(Print title of signatory, if applicable)

Address:

_____

_____

Exhibit 4.4

EXECUTION COPY

FLUIDIGM CORPORATION

SERIES E PREFERRED STOCK PURCHASE AGREEMENT

Initial Closing: November 16, 2009

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(continued)

EXHIBITS

SERIES E PREFERRED STOCK PURCHASE AGREEMENT

THIS SERIES E PREFERRED STOCK PURCHASE AGREEMENT is made as of November 16, 2009, by and among Fluidigm Corporation, a Delaware corporation (the "**Company**"), and the purchasers listed on the Schedule of Purchasers attached hereto as Exhibit A (the "**Schedule of Purchasers**"). The persons and entities listed thereon are hereinafter referred to collectively as the "**Purchasers**" and individually as a "**Purchaser**."

THE PARTIES HEREBY AGREE AS FOLLOWS:

1. Purchase and Sale of Preferred Stock.

1.1 Authorization of the Shares. The Company will on or before the Closing (as defined below) authorize (a) the sale and issuance pursuant to this Agreement of up to 1,721,295 shares (the "**Shares**") of its Series E Preferred Stock (the "**Series E Preferred**"), having the rights, preferences and privileges as set forth in the Third Amended and Restated Certificate of Incorporation of the Company attached hereto as Exhibit B (the "**Restated Certificate**"); and (b) the reservation of shares of Common Stock for issuance upon conversion of the Shares (the "**Conversion Shares**").

1.2 Purchase and Sale of the Shares. Subject to the terms and conditions hereof and in reliance upon the representations, warranties and agreements contained herein, the Company will issue and sell to each Purchaser, severally and not jointly, and each Purchaser will purchase from the Company, severally and not jointly, at the applicable Closing, the number of Shares set forth in the column designated "Number of Series E Shares" opposite the Purchaser's name on the Schedule of Purchasers, at a purchase price of Fourteen Dollars ($14.00) per Share (the "**Purchase Price**"). The Company's agreement with each Purchaser is a separate agreement, and the sale of the Shares to each Purchaser is a separate sale.

1.3 Closing Date. The first closing of the purchase and sale of any Shares hereunder (the "**Initial Closing**") shall be held at the offices of Wilson Sonsini Goodrich & Rosati, Professional Corporation ("**WSGR**"), 650 Page Mill Road, Palo Alto, California 94304, on November 16, 2009 (the "**Closing Date**") or such other date as the Company and a majority-in-interest of the Purchasers may agree. Subsequent closings under this Agreement for the sale of any remaining Shares not sold in the Initial Closing may be held from time to time after the Initial Closing at such time and place as the Company and the relevant Purchasers agree ("**Subsequent Closings**"). For the purposes of this Agreement, the terms "**Closing**" and "**Closing Date**" unless otherwise indicated, refer to the closing or date of closing of the purchase and sale of the Shares with respect to a particular Purchaser or group of Purchasers, whether such closing occurs at the Initial Closing or at a Subsequent Closing. The Company shall be entitled to sell any unpurchased Shares to any Purchaser or to a person who is not a Purchaser and to amend the Schedule of Purchasers to include the information relating to such sales, and such purchasers shall be considered "Purchasers" and parties to this Agreement; provided that (a) such sales are made pursuant to this Agreement or an agreement identical to this one except for the Closing Date and exhibits, and (b) such sales are completed on or prior to March 31, 2010.

1.4 Delivery. At Closing, the Company shall deliver to each Purchaser a certificate, in such denomination and registered in Purchaser's name as set forth on the Schedule of Purchasers, representing the number of Shares which Purchaser is purchasing from the Company, against payment of the purchase price therefore as set forth in the column designated "Total Purchase Price" opposite such Purchaser's name on the Schedule of Purchasers, by (a) delivery to the Company of a check payable to the order of the Company or wire transfer in accordance with the Company's instructions (such amount set forth in the column designated "Cash Investment Amount" opposite a Purchaser's name on the Schedule of Purchasers), (c) conversion of indebtedness (such amount set forth in the column designated "Outstanding Indebtedness Converted" opposite a Purchaser's name on the Schedule of Purchasers) or (d) any combination of the foregoing.

1.5 Conversion of Outstanding Promissory Notes. Each Purchaser that is a holder of a subordinated convertible promissory note issued by the Company pursuant to that certain Note and Warrant Purchase Agreement dated August 25, 2009 (each, a "**Note**"), hereby agrees and acknowledges, severally and not jointly, as follows:

(a) That, upon the Initial Closing, all of the outstanding principal amount of the Note and all accrued and unpaid interest on the Note will automatically convert into Shares at a conversion price per share equal to the Purchase Price in accordance with the terms of this Agreement.

(b) That the full value of such Purchaser's Note for purposes of conversion in accordance with Section 1.4(c) hereof, including all of the outstanding principal amount of the Note and all accrued and unpaid interest on the Note, is set forth opposite such Purchaser's name on Exhibit A hereto under the heading "Outstanding Indebtedness Converted."

(c) That, at the Initial Closing, such Purchaser shall deliver to the Company its original Note for cancellation; provided, however, that following the Initial Closing, the Note will be deemed converted and of no further force or effect, regardless of whether it is delivered for cancellation.

(d) That such Purchaser has reviewed with its own tax advisors the U.S. federal, state, local and foreign tax consequences of this investment and the conversion of the Notes. With respect to such matters, such Purchaser is relying solely on its advisors and not on any statements or representations of the Company or any of its agents, written or oral. Such Purchaser understands that it (and not the Company) shall be responsible for its own tax liability that may arise as a result of this investment or the transactions contemplated by the hereby.

2. Representations and Warranties of the Company. The Company hereby represents and warrants to Purchaser that, except as set forth in the disclosure material (the "**Disclosure Material**") which has been delivered to each Purchaser prior to such Purchaser's execution hereof, each of the representations, warranties and statements contained in this Section 2 is true and correct as of the date of this Agreement and will be true and correct on and as of the Closing Date.

2.1 Organization, Good Standing and Qualification. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to carry on its business as currently

conducted. The Company is duly qualified to transact business and is in good standing in each jurisdiction in which the failure to so qualify, individually or in the aggregate, would have a material adverse effect on its business (as now conducted), properties, or financial condition.

2.2 Corporate Power. The Company will have at the Closing all requisite legal and corporate power and authority to (a) execute and deliver this Agreement; (b) sell and issue the Shares hereunder; (c) issue the Conversion Shares; and (d) carry out and perform its obligations under the terms of this Agreement.

2.3 Subsidiaries. The Company does not presently own or control, directly or indirectly, any interest in any other corporation, association, or other business entity.

2.4 Capitalization. The authorized capital stock of the Company consists, or immediately prior to the Closing will consist, of 28,484,062 shares of Common Stock ("**Common Stock**"), of which 3,169,156 shares are issued and outstanding immediately prior to the Closing and 19,232,725 shares of Preferred Stock ("**Preferred Stock**"), 779,220 of which are designated Series A Preferred Stock of which 657,132 are outstanding immediately prior to the Closing; 1,845,907 of which are designated Series B Preferred Stock of which 1,835,354 are outstanding immediately prior to the Closing; 4,815,606 of which are designated Series C Preferred Stock, 4,619,039 of which are issued and outstanding immediately prior to the Closing; 3,989,217 of which are designated Series D Preferred Stock, 3,771,976 of which are issued and outstanding immediately prior to the Closing; and 7,802,775 of which are designated Series E Preferred Stock, 5,505,331 of which are issued and outstanding immediately prior to the Closing. All such issued and outstanding shares have been duly authorized and validly issued in compliance with applicable laws, and are fully paid and nonassessable.

The Company has reserved:

(i) 1,721,295 shares of Series E Preferred for issuance hereunder and 1,721,295 shares of Common Stock for issuance upon conversion of such Series E Preferred; (ii) 538,048 shares of Series E Preferred for issuance upon exercise of outstanding warrants and 538,048 shares of Common Stock for issuance upon conversion of such Series E Preferred; (iii) 5,505,331 shares of Common Stock for issuance upon conversion of the outstanding shares of Series E Preferred; (iv) 3,771,976 shares of Common Stock for issuance upon conversion of the outstanding shares of Series D Preferred; (v) 116,836 shares of Series D Preferred for issuance upon exercise of outstanding warrants and 116,836 shares of Common Stock for issuance upon conversion of such Series D Preferred; (vi) 4,619,039 shares of Common Stock for issuance upon conversion of the outstanding shares of Series C Preferred Stock; (vii) 13,859 shares of Series C Preferred Stock for issuance upon exercise of outstanding warrants and 13,859 shares of Common Stock for issuance upon conversion of such Series C Preferred Stock; (viii) 1,835,354 shares of Common Stock for issuance upon conversion of the outstanding Series B Preferred Stock; (ix) 657,132 shares of Common Stock for issuance upon conversion of the outstanding Series A Preferred Stock; (x) an aggregate of 3,908,475 shares of Common Stock for issuance to employees and consultants of the Company pursuant to the Company's 2009 Equity Incentive Plan, pursuant to which no options to purchase shares are granted and outstanding and 1,746,478 shares are available for future grant, and (xi) an aggregate of 2,161,997 shares of Common Stock for issuance to employees and consultants of the Company pursuant to the Company's 1999 Stock Option Plan, pursuant to which options to

purchase 2,161,997 shares are granted and outstanding and no shares are available for future grant. As of the date hereof and after giving effect to the purchase of Shares hereunder, each share of each series of the Company's Preferred Stock is convertible into one share of the Company's Common Stock. Other than with respect to the shares reserved for issuance in this paragraph, or as set forth in the Ancillary Agreements (as defined below), there are no outstanding rights, options, warrants, conversion rights, preemptive rights, rights of first refusal or similar rights for the purchase or acquisition from the Company of any securities of the Company. There are no outstanding obligations of the Company to repurchase or redeem any of its securities.

2.5 Authorization. All corporate action on the part of the Company, its officers, directors and stockholders necessary for the authorization, execution and delivery of this Agreement, the Ninth Amended and Restated Investor Rights Agreement in the form attached hereto as Exhibit D (the "**Investor Rights Agreement**"), the performance of all obligations of the Company under this Agreement and the Investor Rights Agreement (other than those registration obligations contained in Section 1 of the Investor Rights Agreement), and any other agreements to which the Company is a party, the execution and delivery of which is a contemplated hereby (the "**Ancillary Agreements**") and the authorization, issuance (or reservation for issuance), sale and delivery of the Shares and the Conversion Shares has been taken or will be taken prior to the Closing. This Agreement and the Investor Rights Agreement constitute valid and legally binding obligations of the Company, enforceable against the Company in accordance with their respective terms, subject to: (a) judicial principles limiting the availability of specific performance, injunctive relief, and other equitable remedies; (b) bankruptcy, insolvency, reorganization, moratorium or other similar laws now or hereafter in effect generally relating to or affecting creditors' rights; and (c) limitations on the enforceability of the indemnification provisions of the Investor Rights Agreement.

2.6 Valid Issuance of Preferred and Common Stock. The Shares that are being purchased by the Purchasers hereunder, when issued, sold and delivered in accordance with the terms of this Agreement for the consideration expressed herein, will be duly and validly issued, fully paid, and nonassessable. The Conversion Shares have been duly and validly reserved for issuance and, upon issuance in accordance with the terms of this Agreement and the Restated Certificate will be free of restrictions on transfer other than restrictions on transfer under this Agreement and the Investor Rights Agreement and under applicable state and federal securities laws. The Shares and the Conversion Shares will be free of restrictions on transfer other than restrictions on transfer under this Agreement and the Investor Rights Agreement and under applicable state and federal securities laws. The Conversion Shares may be issued without any registration or qualification under state and federal securities laws as such laws are currently in effect.

2.7 Governmental Consents. No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority on the part of the Company is required in connection with the offer, sale or issuance of the Shares or the Conversion Shares or the consummation of any other transaction contemplated hereby, except for (a) the filing of the Restated Certificate with the Delaware Secretary of State prior to the Initial Closing and (b) filings required pursuant to applicable federal and state securities laws and blue sky laws, which filings, the Company covenants to complete within the required statutory period.

2.8 Litigation. There is no action, suit, proceeding or investigation pending or, to the Company's knowledge, currently threatened against the Company before any court, administrative agency or other governmental body which questions the validity of this Agreement or the Investor Rights Agreement or the right of the Company to enter into any of them, or to consummate the transactions contemplated hereby or thereby, or which could result, either individually or in the aggregate, in any material adverse change in the condition (financial or otherwise), business, property, assets or liabilities of the Company, nor is the Company aware that there is any basis for the foregoing. The Company is not a party or subject to, and none of its assets is bound by, the provisions of any order, writ, injunction, judgment or decree of any court or government agency or instrumentality. There is no action, suit, proceeding or investigation by or involving the Company currently pending or that the Company intends to initiate.

2.9 Employees. Each employee of the Company has executed a proprietary information and invention assignment agreement substantially in the form or forms made available to the Purchasers. To the Company's knowledge, no officer or key employee is in violation of any prior employment contract or proprietary information agreement. No employees of the Company are represented by any labor union or covered by any collective bargaining agreement. There is no pending or, to the Company's knowledge, threatened labor dispute involving the Company and any group of its employees. The Company is not aware that any officer or key employee intends to terminate his or her employment with the Company within the six months after Closing. The Company does not have a present intention to terminate the employment of any officer or key employee. Each officer and key employee is devoting 100% of his or her business time to the conduct of the business of the Company. The Company is not aware that any officer or key employee intends to work less than full time during the six months after Closing. Subject to general principles related to wrongful termination of employees, the employment of each officer and employee of the Company is terminable at will.

2.10 Patents and Other Intangible Assets.

(a) The Company owns, or is licensed or otherwise has the legally enforceable right to use, all copyrights, domain names, maskworks, applications for the issuance or registration of any of the foregoing, trade secrets, confidential or proprietary know-how, data and information, ideas, inventions, designs, developments, algorithms, processes, schematics, techniques, computer programs, applications and other software, works of authorship, creative effort and, to the Company's knowledge after such investigation as the Company deemed reasonable, patents, patent applications, trademarks (including service marks and design marks) and applications therefor, tradenames (all of the foregoing generically, "**Intellectual Property Rights**") utilized in, or necessary for, its business as now conducted (collectively, the "**Company Intellectual Property**") without infringing upon the right of any person, corporation or other entity.

(b) To the Company's knowledge, the Company has not infringed or misappropriated any Intellectual Property Right of any other person, corporation or other entity. The Company has not received any communication or otherwise received any information alleging any such conduct by the Company or asserting a claim by any third party to the ownership of, or right to use, any of the Company Intellectual Property, and the Company does not know of any basis for any such claim. The Company is not aware of any action, suit, proceeding or investigation pending or currently threatened against the Company (or any third party owner or licensor of rights to the

Company of any of the Company Intellectual Property) which would have a material impact on the Company's ownership of or exclusive or co-exclusive rights to use, the Company Intellectual Property.

(c) The Company is not aware that any of its employees is obligated under any agreement, or subject to any judgment, decree or order of any court or administrative agency, that would materially interfere with his or her ability to fully and freely perform their duties to the Company or that would conflict with the Company's business. To the Company's knowledge, neither the filing of the Restated Certificate nor the execution and delivery of this Agreement or the Investor Rights Agreement, nor the carrying on of the Company's business by the employees of the Company, will conflict with or result in a material breach of the terms, conditions, or provisions of, or constitute a default under, any agreement under which any such employee is now obligated. The Company does not utilize, and will not be required to utilize, any invention, development or work of authorship of any of its employees (or persons it currently intends to hire) made prior to their employment by the Company.

(d) Except as described in Section 2.10(d) of the Disclosure Material, the Company (i) is not obligated, or under any liability whatsoever to make any payments by way of royalties, fees or otherwise, to any owner or licensor of, or other claimant to, any Company Intellectual Property, and (ii) is not a party to any agreement concerning the Company Intellectual Property or any other Intellectual Property Right used or to be used by the Company in its business as conducted. No founder, director, officer or employee of the Company, or, to the Company's knowledge, no stockholder of the Company has any interest in the Company Intellectual Property.

(e) Except with respect to any rights granted under the agreements described in Section 2.10(e) of the Disclosure Material, the Company owns exclusively all rights arising from or associated with the research and development efforts of the Company and its founders, employees and independent contractors relating to the Company's business as now conducted, and all such rights form part of the Company Intellectual Property. The Company has secured valid written assignments from all employees and independent contractors who contributed to the creation or development of any of the Company Intellectual Property of the rights to such contributions that the Company does not already own by operation of law. The Company has not received notice of any claim being asserted by any current or former employee, independent contractor or other third party to the ownership, of or right to use, any of the Company Intellectual Property, or challenging or questioning the validity of any of the Company Intellectual Property, and the Company is not aware of any basis for any such claim.

(f) The Company has taken reasonable steps to protect and preserve the confidentiality of all material trade secrets included in Company Intellectual Property not otherwise protected by patents or copyright ("**Confidential Information**"). All disclosure of Confidential Information to a third party has been pursuant to the terms of a written confidentiality or non-disclosure agreement between the Company and such third party.

(g) The Company hereby represents and warrants that the data, written and oral reports and other representations and information that the Company provided to its investors (or their counsel) pertaining to the Company Intellectual Property, when taken as a whole, were

truthful and, to the Company's knowledge, accurate in all material respects, and there was no omission therefrom which made such information misleading, or incomplete in any material way.

2.11 Compliance with Other Instruments. The Company is not in violation or default of any provision of its Restated Certificate or bylaws, each as amended and in effect on and as of the Closing. The Company is not in violation or default of any material provision of any instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order or obligation to which it is a party or by which it or any of its properties or assets are bound or, to the best of its knowledge, of any provision of any federal, state or local statute, rule or governmental regulation. The execution, delivery and performance of and compliance with this Agreement and the Investor Rights Agreement, and the issuance and sale of the Shares and the Conversion Shares will not result in any such violation, be in conflict with or constitute, with or without the passage of time or giving of notice, a default under any such provision, license, indenture, instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order or obligation; or require any consent or waiver under any such provision, license, indenture, instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order or obligation (other than any consents or waivers that have been obtained); or result in the creation of any mortgage, pledge, lien, encumbrance or charge upon any of the properties or assets of the Company pursuant to any such provision, license, indenture, instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order or obligation.

2.12 Permits. The Company has all franchises, permits, licenses, and any similar authority necessary for the conduct of its business as now being conducted. The Company is not in default in any material respect under any of such franchises, permits, licenses, or other similar authority.

2.13 Environmental and Safety Laws. To its knowledge, the Company is not in violation of any applicable statute, law, or regulation relating to the environment or occupational health and safety, and to its knowledge, no material expenditures by the Company are or will be required in order to comply with any such existing statute, law, or regulation.

2.14 Title to Property and Assets. The Company has good and marketable title to all of its properties and assets free and clear of all pledges, mortgages, liens security interests, charges and encumbrances, except liens for current taxes and assessments not yet due and possible minor liens and encumbrances which do not, in any case, individually or in the aggregate, materially detract from the value of the property subject thereto or materially impair the ownership or use of said property or assets, or the operations of the Company. With respect to the property and assets it leases, the Company is in compliance with such leases and, to the best of its knowledge, holds a valid leasehold interest free of all liens, claims or encumbrances. The Company's properties and assets are in good condition and repair in all material respects.

2.15 Agreements; Action.

(a) Except for agreements contemplated by this Agreement, there are no agreements, understandings or proposed transactions between the Company and any of its officers, directors, affiliates, or any affiliate thereof other than standard option grants and stock purchase agreements entered into prior to the date of this Agreement.

(b) There are no agreements, understandings, instruments, contracts, proposed transactions, judgments, orders, writs or decrees to which the Company is a party or by which it is bound that may involve (i) obligations (contingent or otherwise) of, or payments by the Company in excess of, $100,000, other than in the ordinary course of business, (ii) the license of any patent, copyright, trade secret or other proprietary right to or from the Company other than standard commercial software licenses, (iii) provisions restricting or adversely affecting the development, manufacture or distribution of the Company's products or services, or (iv) indemnification by the Company with respect to infringements of proprietary rights other than indemnifications entered into in the ordinary course of business.

(c) For the purposes of subsection (b) above, all indebtedness, liabilities, agreements, understandings, instruments, contracts and proposed transactions involving the same person or entity (including persons or entities the Company has reason to believe are affiliated therewith) shall be aggregated for the purpose of meeting the individual minimum dollar amounts of such subsection.

(d) The Company is not a party to and is not bound by any contract, agreement or instrument, or subject to any restriction under its Restated Certificate or its bylaws that adversely affects its business as now conducted, its properties or its financial condition.

(e) The Company is not a guarantor or indemnitor of any indebtedness of any other person or entity.

(f) The Company has not engaged in the past three months in any discussion (i) with any representative of any entity or entities regarding the merger of the Company with or into any such entity or entities or any affiliate thereof, (ii) with any representative of any entity or any individual regarding the sale, conveyance or disposition of all or substantially all of the assets of the Company or a transaction or series of related transactions in which more than fifty percent (50%) of the voting power of the Company would be disposed of, or (iii) regarding any other form of liquidation, dissolution or winding up of the Company.

2.16 Financial Statements. The Company has made available to each Purchaser its audited balance sheets dated as of December 31, 2006 and December 29, 2007, and the related statements of operations, convertible preferred stock and stockholders' equity (deficit), and cash flows for the fiscal years then ended. The Company has also made available to each Purchaser unaudited balance sheet dated December 27, 2008 and the related statements of operations, convertible preferred stock and stockholders' equity (deficit), and cash flows for the fiscal year then ended. The Company has also made available to each Purchaser its unaudited preliminary balance sheet dated as of September 30, 2009, and the related statements of operations and cash flows for the period then ended (collectively, the "**Financial Statements**"). The Financial Statements are complete and correct in all material respects and have been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods indicated. The Financial Statements accurately set out and describe the financial condition and operating results of the Company as of the date, and during the periods, indicated therein. Except as set forth in the Financial Statements, the Company has no material liabilities, contingent or otherwise, other than (a) liabilities incurred in the ordinary course of business subsequent to September 30, 2009, and (b) obligations under contracts and commitments incurred in the ordinary course of business and not

required under generally accepted accounting principles to be reflected in the Financial Statements, which, in both cases, individually or in the aggregate are not material to the financial condition or operating results of the Company.

2.17 Changes. Since September 30, 2009:

(a) the Company has not (i) declared or paid any dividends or authorized or made any distribution upon or with respect to any class or series of its capital stock, (ii) incurred any indebtedness for money borrowed or any other liabilities outside the ordinary course of its business individually in excess of $100,000 or, in the case of indebtedness and/or liabilities individually less than $100,000, in excess of $200,000 in the aggregate, (iii) made any loans or advances to any person, other than ordinary advances for reimbursable businesses expenses, (iv) sold, exchanged, assigned, transferred, licensed or otherwise disposed of any of its assets or rights (including Company Intellectual Property), other than the sale of its inventory in the ordinary course of business, (v) waived or compromised a valuable right or a material debt owed to it, (vi) materially changed any compensation arrangement or agreement with any employee, officer, director or stockholder, or (vii) arranged or committed to do any of the things described in this subsection (a); and

(b) there has not been (i) a loss of, or a material order cancellation by, any major customer of the Company, (ii) any damage, destruction or loss, whether or not covered by insurance, materially and adversely affecting the business, properties, or financial condition of the Company, (iii) any change in the assets, liabilities, financial condition or operating results of the Company from that reflected in the Financial Statements, except changes in the ordinary course of business that have not been, in the aggregate, materially adverse, (iv) any resignation or termination of any officer or key employee of the Company, and the Company is not aware of the impending resignation or termination of employment of any such officer, or (v) to the best of the Company's knowledge, any other event or condition of any character that would materially and adversely affect the business, properties, or financial condition of the Company.

2.18 Brokers or Finders. The Company has not agreed to incur, directly or indirectly, any liability for brokerage or finders' fees, agents' commissions or other similar charges in connection with this Agreement or any of the transactions contemplated hereby.

2.19 Qualified Small Business Stock.

(a) As of and immediately following the Closing, the Shares will meet each of the requirements for qualification as "qualified small business stock" set forth in Section 1202(c) of the Internal Revenue Code of 1986, as amended (the "**Code**"), including without limitation the following: (i) the Company will be a domestic C corporation, (ii) the Company will not have made any purchases of its own stock described in Code Section 1202(c)(3)(B) during the one-year period preceding the Closing, and (iii) the Company's (and any predecessor's) aggregate gross assets, as defined by Code Section 1202(d)(2), at no time from the date of incorporation of the Company and through the Closing have exceeded or will exceed $50 million, taking into account the assets of any corporations required to be aggregated with the Company in accordance with Code Section 1202(d)(3).

(b) As of the Closing, at least 80% (by value) of the assets of the Company are used by it in the active conduct of one or more qualified trades or businesses, as defined by Code Section 1202(e)(3), and the Company is an eligible corporation, as defined by Code Section 1202(e)(4).

2.20 Employee Benefit Plans. The Company does not have any Employee Benefit Plan as defined in the Employee Retirement Income Security Act of 1974 other than the Company's 401(k) Plan. The Company is in material compliance with the terms of the Company's 401(k) Plan and has not received notice of any material increase in the costs of such plans.

2.21 Tax Matters. The Company has filed all tax returns and reports as required by law. These returns and reports are true and correct in all material respects. The Company has paid all taxes and other assessments due. The Company has not elected pursuant to the Code, to be treated as a Subchapter S corporation or a collapsible corporation pursuant to Section 1362(a) or Section 341(f) of the Code, nor has it made any other elections pursuant to the Code (other than elections that relate solely to methods of accounting, depreciation or amortization) that would have a material effect on the business, properties or condition (financial or otherwise) of the Company. None of the Company's tax returns have ever been audited by any governmental authorities. The Company has withheld or collected from each payment made to its employees the amount of all taxes (including without limitation, federal income taxes, Federal Insurance Contribution Act taxes and Federal Unemployment Tax Act taxes) required to be withheld or collected therefrom, and has paid the same to the proper tax receiving officers or authorized depositories.

2.22 Insurance. The Company has in full force and effect fire and casualty insurance policies, with extended coverage, sufficient in amount (subject to reasonable deductibles) to allow it to replace any of its properties that might be damaged or destroyed. The Company has obtained term life insurance payable to the Company on the lives of Stephen Quake and Gajus Worthington in the amount of $500,000. The Company has in full force and effect directors and officers liability insurance, covering all of its directors, with aggregate coverage in the amount of $2,000,000.

2.23 Corporate Documents. The Restated Certificate and bylaws of the Company are in the form made available to the Purchasers. The copy of the minute books of the Company made available to the Purchasers' counsel contains true and correct minutes of all meetings of directors (including any committees thereof) and stockholders and all actions by written consent taken without a meeting by the directors and stockholders since January 1, 2007.

2.24 Disclosure. The Company has fully provided each Purchaser with all the information which such Purchaser has requested in connection with the purchase of the Shares hereunder, as well as all information which the Company in its judgment believes is reasonably necessary to enable such Purchaser to make a decision as to whether to invest in the Company. Neither this Agreement with the exhibits hereto, nor any other statements, certificates or documents made or delivered in connection herewith or therewith, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements herein or therein not misleading in light of the circumstances under which they were made.

2.25 Offering. Subject in part to the truth and accuracy of each Purchaser's representations set forth in this Agreement, the offer, sale and issuance of the Shares and the Conversion Shares as contemplated by this Agreement is exempt from the registration requirements of the Securities Act of 1933, as amended (the "**Securities Act**"), and from the registration or qualification requirements of applicable state securities laws or blue sky laws, and neither the Company nor any authorized agent acting on its behalf will take any action hereafter that would cause the loss of such exemption.

2.26 Returns and Complaints. The Company has not received customer complaints concerning alleged defects in the design of its products that, if true, would have, individually or in the aggregate, a material adverse effect on its business, properties, or financial condition.

3. Representations and Warranties of the Purchasers. Each Purchaser, individually and not jointly, hereby represents and warrants as of the Closing Date that:

3.1 Experience. Such Purchaser is experienced in evaluating start-up companies such as the Company, is able to evaluate and represent its own interests in transactions such as the one contemplated by this Agreement, has such knowledge and experience in financial and business matters such that Purchaser is capable of evaluating the merits and risks of Purchaser's prospective investment in the Company, and has the ability to bear the economic risks of its investment.

3.2 Investment. Such Purchaser is acquiring the Shares and the Conversion Shares, for investment for such Purchaser's own account and not with the view to, or for resale in connection with, any distribution thereof. Such Purchaser understands that the Shares and the Conversion Shares have not been registered under the Securities Act by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent as expressed herein. Such Purchaser further represents that it does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participation to any third person with respect to any of the Shares or the Conversion Shares, other than a transfer not involving a change of beneficial ownership. Such Purchaser understands and acknowledges that the offering of the Shares pursuant to this Agreement will not be registered under the Securities Act on the ground that the sale provided for in this Agreement is exempt from the registration requirements of the Securities Act.

3.3 Rule 144. Such Purchaser acknowledges that the Shares and the Conversion Shares must be held indefinitely unless subsequently registered under the Securities Act or an exemption from such registration is available. Such Purchaser is aware of the provisions of Rule 144 promulgated under the Securities Act which permit limited resale of shares purchased in a private placement subject to the satisfaction of certain conditions. Such Purchaser covenants that, in the absence of an effective registration statement covering the stock in question, such Purchaser will sell, transfer, or otherwise dispose of the Shares or the Conversion Shares only in a manner consistent with applicable securities laws and such Purchaser's representations and covenants set forth in this Section 3. In connection therewith, such Purchaser acknowledges that the Company will make a notation on its stock books regarding the restrictions on transfers set forth in this Section 3 and will transfer securities on the books of the Company only to the extent not inconsistent therewith.

3.4 Legends. Purchaser understands and acknowledges that the certificates evidencing its Shares and the Conversion Shares will be imprinted with legends in the form set forth in Section 1.3 of the Investor Rights Agreement.

3.5 No Public Market. Such Purchaser understands that no public market now exists for any of the securities issued by the Company, and that the Company has made no assurances that a public market will ever exist for the Shares or the Conversion Shares.

3.6 Access to Data. Such Purchaser has received and reviewed information about the Company and has had an opportunity to discuss the Company's business, management and financial affairs with its management and to review the Company's facilities. The foregoing, however, does not limit or modify the representations and warranties of the Company in Section 2 of this Agreement or the right of the Purchasers to rely thereon.

3.7 Authorization. This Agreement when executed and delivered by such Purchaser will constitute a valid and legally binding obligation of the Purchaser, enforceable against the Purchaser in accordance with its terms, subject to: (a) judicial principles respecting election of remedies or limiting the availability of specific performance, injunctive relief, and other equitable remedies; (b) bankruptcy, insolvency, reorganization, moratorium or other similar laws now or hereafter in effect generally relating to or affecting creditors' rights; and (c) limitations on the enforceability of the indemnification provisions of the Investor Rights Agreement.

3.8 Accredited Investor. Such Purchaser acknowledges that it is an "accredited investor" as defined in Rule 501 of Regulation D as promulgated by the Securities and Exchange Commission under the Securities Act and shall submit to the Company such further assurances of such status as may be reasonably requested by the Company. The principal address of such Purchaser is as set forth on the Schedule of Purchasers.

3.9 Public Solicitation. Purchaser knows of no public solicitation or advertisement of an offer in connection with the proposed issuance and sale of the Shares.

3.10 Tax Advisors. Purchaser has reviewed with Purchaser's own tax advisors the federal, state and local tax consequences of this investment, where applicable, and the transactions contemplated by this Agreement. Each Purchaser is relying solely on such advisors and not on any statements or representations of the Company or any of its agents and understands that each Purchaser (and not the Company) shall be responsible for the Purchaser's own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

3.11 Purchaser Counsel. Purchaser acknowledges that it has had the opportunity to review this Agreement, the exhibits and the schedules attached hereto and the transactions contemplated by this Agreement with Purchaser's own legal counsel. Each Purchaser is relying solely on such counsel and not on any statements or representations of the Company or any of its agents for legal advice with respect to this investment or the transactions contemplated by this Agreement.

3.12 Brokers or Finders. The Company has not incurred and will not incur, directly or indirectly, as a result of any action taken by such Purchaser, any liability for brokerage or finders' fees or agents' commissions or any similar changes in connection with this Agreement.

3.13 Non-United States Persons. If Purchaser is not a United States person, such Purchaser hereby represents that such Purchaser is satisfied as to the full observance of the laws of such Purchaser's jurisdiction in connection with any invitation to subscribe for the Shares and the Conversion Shares or any use of this Agreement, the Investor Rights Agreement and the Voting Agreement, including (a) the legal requirements within such Purchaser's jurisdiction for the purchase of Shares and the Conversion Shares, (b) any foreign exchange restrictions applicable to such purchase, (c) any governmental or other consents that may need to be obtained and (d) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of such securities. Such Purchaser's subscription and payment for, and such Purchaser's continued beneficial ownership of, the Shares and the Conversion Shares will not violate any applicable securities or other laws of such Purchaser's jurisdiction.

4. Conditions of Purchaser's Obligations at Closing. The obligations of each Purchaser under this Agreement are subject to the fulfillment on or before the Closing of each of the following conditions, the waiver of which shall not be effective against any Purchaser who does not consent in writing thereto:

4.1 Amendment of Notes and Warrants. The Company and the holders of more than 50% of the aggregate outstanding principal amount of the Notes shall have executed an amendment to the Notes and related warrants (the "**Warrants**"), pursuant to which, upon the Initial Closing, the outstanding principal amount of each Note and all accrued and unpaid interest thereon will automatically convert into shares of Series E Preferred at a conversion price per share equal to the Purchase Price in accordance with the terms of this Agreement, and the Warrants will become exercisable for shares of Series E Preferred at the Purchase Price.

4.2 Minimum Cash Investment. At least $7.5 million of the Purchase Price to be paid for the Shares sold at the Initial Closing shall consist of cash or wire transfers of immediately available funds.

4.3 Representations and Warranties. The representations and warranties of the Company contained in Section 2 shall be true on and as of the Closing with the same effect as though such representations and warranties had been made on and as of the date of the Closing.

4.4 Performance. The Company shall have performed and complied with all agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the Closing.

4.5 Compliance Certificate. The President of the Company shall deliver to each Purchaser at the Closing a certificate stating that the conditions specified in Sections 4.3 and 4.4 have been fulfilled and stating that as of the Closing there shall have been no adverse change in the business, affairs, operations, properties, assets or condition of the Company.

4.6 Blue Sky. The Company shall have obtained all necessary permits and qualifications, if any, or secured an exemption therefrom, required by any state or country prior to the offer and sale of the Shares.

4.7 Opinion of Company Counsel. Each Purchaser in the Initial Closing shall have received from WSGR, counsel for the Company, an opinion, dated as of the Initial Closing, in the form attached hereto as Exhibit E.

4.8 Investor Rights Agreement. The Company and each Purchaser shall have entered into the Investor Rights Agreement.

4.9 Restated Certificate. The Restated Certificate shall have been accepted for filing by the Delaware Secretary of State and shall be in full force and effect as of the Closing Date.

4.10 Corporate Proceedings; Waivers and Consents. All corporate and other proceedings to be taken and all waivers, consents and permits necessary or appropriate for the consummation of the transactions contemplated by this Agreement will have been taken or obtained.

4.11 Sublicense Agreement. Solely with respect to the obligations of Artemis Health, Inc. ("**Artemis**") as a Purchaser under this Agreement, the Company shall have executed and delivered to Artemis a sublicense agreement with Artemis in form and substance satisfactory to Artemis. The condition set forth in this Section 4.11 shall apply only to the obligations of Artemis under this Agreement and not to the other Purchasers and this condition may be amended or waived solely by written instrument signed by both Artemis and the Company.

5. Conditions of the Company's Obligations at Closing. The obligations of the Company to each Purchaser under this Agreement are subject to the fulfillment on or before the Closing of each of the following conditions by that Purchaser:

5.1 Representations and Warranties. The representations and warranties of the Purchasers contained in Section 3 shall be true on and as of the Closing with the same effect as though such representations and warranties had been made on and as of the Closing.

5.2 Payment of Purchase Price. Each Purchaser shall have delivered the purchase price to the Company against delivery of the Shares by the Company to such Purchaser, as set forth in Section 1.4 and subject to Section 1.5.

5.3 Blue Sky. The Company shall have obtained all necessary permits and qualifications, if any, or secured an exemption therefrom, required by any state or country for the offer and sale of the Shares.

5.4 Investor Rights Agreements. The Company and each Purchaser shall have entered into the Investor Rights Agreement.

5.5 Restated Certificate. The Restated Certificate shall have been accepted for filing by the Delaware Secretary of State and shall be in full force and effect as of the Closing Date.

5.6 Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated at the Closing hereby, and all documents and instruments incident to these transactions, shall be reasonably satisfactory in substance to the Company and its counsel.

6. Miscellaneous.

6.1 Governing Law; Jurisdiction. This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed in all respects by the laws of the State of California, without regard to any provisions thereof relating to conflicts of laws among different jurisdictions. The parties hereto agree to submit to the exclusive jurisdiction of the federal and state courts of San Mateo County, California, with respect to the breach or interpretation of this Agreement or the enforcement of any and all rights, duties, liabilities, obligations, powers, and other relations between the parties arising under this Agreement.

6.2 Indemnification. The Company shall indemnify, defend and hold each Purchaser harmless against all liability, loss or damage (collectively, "**Losses**" and individually, a "**Loss**") arising from any litigation, proceeding or dispute arising from such Purchaser's status as a stockholder of the Company other than Losses arising from such Purchaser's gross negligence or willful misconduct, provided that such indemnification shall apply only to litigation, proceedings or disputes arising prior to the Company's Initial Public Offering (as defined in the Investor Rights Agreement) and the Company's obligation to indemnify any Purchaser shall be limited in amount to the amount paid by such Purchaser for the purchase of such Purchaser's Shares as set forth on Exhibit A. The foregoing indemnity is not intended to supersede or replace the indemnification obligations of the parties set forth in Section 1.10 of the Investor Rights Agreement nor shall it be construed to limit any other rights and remedies of the Purchasers under this Agreement or any other indemnification to which such Purchaser may be entitled under any other agreement of the Company. The foregoing indemnification rights are transferable only to Affiliates (as defined in the Investor Rights Agreement) of a Purchaser.

6.3 Survival. The representations, warranties, covenants and agreements made herein shall survive any investigation made by any Purchaser or the Company and the Closing of the transactions contemplated hereby; provided, however, that such representations and warranties are only made as of the date of such execution and delivery and as of such Closing.

6.4 Successors and Assigns. Except as otherwise provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto; provided, however, that the rights of a Purchaser to purchase Shares at the Closing shall not be assignable without the consent of the Company.

6.5 Entire Agreement; Amendment. This Agreement and the other documents delivered pursuant hereto constitute the full and entire understanding and agreement among the parties with regard to the subjects hereof and thereof relating to the purchase of the Shares. Neither this Agreement nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument signed by the Company and the holder or holders of greater than fifty percent (50%) of the then-outstanding Shares or the Conversion Shares. Notwithstanding the foregoing, (i) Section 4.11 of this Agreement may only be amended, waived, discharged or terminated by written instrument signed by both the Company and Artemis, and (ii) any additional purchaser pursuant to Section 1.3 may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement and such purchaser shall be deemed a Purchaser hereunder. The parties agree that the Schedule of Purchasers attached hereto as Exhibit A shall be updated automatically without any formal amendment to reflect the addition of any such

additional Purchaser. Any amendment or waiver effected in accordance with this Section 6.5 shall be binding upon the Purchasers and each transferee of the Shares (or the Common Stock issuable upon conversion thereof), each future holder of all such securities, and the Company.

6.6 Notices, Etc. All notices and other communications required or permitted hereunder, shall be in writing and shall be personally delivered, sent by facsimile, mailed by registered or certified mail, postage prepaid, return receipt requested, or delivered by a nationally recognized overnight courier, addressed (a) if to a Purchaser, at such Purchaser's address or facsimile number set forth on the Schedule of Purchasers, or at such other address or facsimile number as such Purchaser shall have furnished to the Company in writing, or (b) if to the Company, at its address or facsimile number set forth on the signature page to this Agreement addressed to the attention of the Corporate Secretary, or at such other address or facsimile number as the Company shall have furnished to the Purchasers. Any such notice or communication shall be deemed to have been received (i) in the case of personal delivery or delivery by telecopier, on the date of such delivery, (ii) in the case of a commercial overnight courier, on the next business day after the date when sent and (iii) in the case of mailing, on the fifth business day following that on which the piece of mail containing such communication is posted.

6.7 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any holder of any Shares upon any breach or default of the Company under this Agreement shall impair any such right, power or remedy of such holder, nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any holder of any breach or default under this Agreement, or any waiver on the part of any holder of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing or as provided in this Agreement. All remedies, either under this Agreement or by law or otherwise afforded to any holder, shall be cumulative and not alternative.

6.8 California Corporate Securities Law. THE SALE OF THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF SUCH SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO SUCH QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM THE QUALIFICATION BY SECTION 25100, 25102, OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS AGREEMENT ARE EXPRESSLY CONDITIONED UPON SUCH QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.

6.9 Finder's Fee. The Company and each Purchaser shall each indemnify and hold the other harmless from any liability for any commission or compensation in the nature of a finder's fee (including the costs, expenses and legal fees of defending against such liability) for which the Company or the Purchasers, or any of their respective partners, employees, or representatives, as the case may be, is responsible.

6.10 Expenses. The Company and each Purchaser shall bear its own expenses and legal fees incurred on its behalf with respect to this Agreement and the transactions contemplated hereby, provided, however, that if a Closing is effected, the Company shall reimburse the reasonable documented fees of one counsel for the Purchasers, such amount not to exceed $25,000, by wire transfer at such Closing.

6.11 Waiver of Conflict. Each of the Purchasers and the Company acknowledges that WSGR may have represented and may currently represent Purchasers. In the course of such representation, WSGR may have come into possession of confidential information relating to such Purchasers. Each of the Purchasers and the Company acknowledges that WSGR is representing only the Company in this transaction. Pursuant to Rule 3-310 of the Rules of Professional Conduct promulgated by the State Bar of California, an attorney must avoid representations in which the attorney has or had a relationship with another party interested in the representation without the informed written consent of all parties affected. By executing this Agreement, each of the Purchasers and the Company hereby waives any actual or potential conflict of interest that may arise in this financing as a result of WSGR's representation of such persons or entities, WSGR's possession of such confidential information and the participation by WSGR's affiliate in the financing. Each of the Purchasers and the Company represents that it has had the opportunity to consult with independent counsel concerning the giving of this waiver.

6.12 Severability. In the event that any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect without said provision; provided that no such severability shall be effective if it materially changes the economic benefit of this Agreement to any party.

6.13 Counterparts; Facsimile. This Agreement may be executed in any number of counterparts, each of which may be executed by less than all Purchasers, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument. This Agreement may be executed by facsimile signature.

6.14 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

6.15 Exculpation Among Purchasers. Each Purchaser acknowledges that it is not relying upon any person, firm or corporation (including without limitation any other Purchaser), other than the Company and its officers and directors (acting in their capacity as representatives of the Company), in deciding to invest and in making its investment in the Company. Each Purchaser agrees that no other Purchaser nor the respective controlling persons, officers, directors, partners, agents or employees of any other Purchaser shall be liable to such Purchaser for any losses incurred by such Purchaser in connection with its investment in the Company.

6.16 Like Treatment of Holders. The Company shall not directly or indirectly pay or cause to be paid any consideration, whether by way of interest, fee, payment for the redemption or exchange of Preferred Stock, or otherwise to any holder of Preferred Stock for or as inducement to, any consent, waiver or amendment of any term or provision of the Preferred Stock, this Agreement or the Investor Rights Agreement unless equivalent consideration is offered on equivalent terms and

conditions to all Purchasers of Preferred Stock under this Agreement bound by such consent, waiver or amendment.

6.17 Jury Trial. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING (WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATED TO THIS AGREEMENT.

*****

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

COMPANY:

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington
Gajus V. Worthington,
President and Chief Executive Officer

Address:

7000 Shoreline Court, Suite 100
South San Francisco, CA 94080

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

ARTEMIS HEALTH, INC.
a Delaware Corporation

By: /s/ Phyllis Whiteley

Name: Phyllis Whiteley

Title: Chief Executive Officer

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

EUCLIDSR PARTNERS, L.P.

By: EuclidSR Associates, L.P.,
its General Partner

By: /s/ Raymond J. Whitaker

Name: Raymond J. Whitaker

Title: General Partner

EUCLIDSR BIOTECHNOLOGY PARTNERS, L.P.

By: EuclidSR Biotechnology Associates, L.P., its General Partner

By: /s/ Raymond J. Whitaker

Name: Raymond J. Whitaker

Title: General Partner

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

INTERWEST PARTNERS VII, L.P.

By: InterWest Management Partners VII, LLC,
its General Partner

By: /s/ Michael Sweeney

Name: Michael Sweeney

Title: As agent for the general partner

INTERWEST INVESTORS VII, L.P.

By: InterWest Management Partners VII, LLC,
its General Partner

By: /s/ Michael Sweeney

Name: Michael Sweeney

Title: As agent for the general partner

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

VERSANT AFFILIATES FUND 1-A, L.P.
VERSANT AFFILIATES FUND 1-B, L.P.
VERSANT SIDE FUND I, L.P.
VERSANT VENTURE CAPITAL I, L.P.

By: Versant Ventures I, LLC
its General Partner

By: /s/ Samuel D. Colella

Name: Samuel D. Colella

Title: Managing Director

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

BIOMEDICAL SCIENCES INVESTMENT FUND PTE LTD

By: /s/ Chu Swee Yeok

Name: Chu Swee Yeok

Title: Director

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

WS INVESTMENT COMPANY, LLC (2009A)

By: /s/ James A. Terranova

Name: _____

Title: _____

WS INVESTMENT COMPANY, LLC (2009C)

By: /s/ James A. Terranova

Name: _____

Title: _____

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

ALLOY VENTURES 2005, L.P.

By: Alloy Ventures 2005, LLC
its General Partner

By: /s/ Craig C. Taylor

Name: Craig C. Taylor

Title: Managing Member of Alloy Ventures 2005 LLC
Managing Member of Alloy Ventures 2005, L.P.

ALLOY VENTURES 2002, L.P.
ALLOY PARTNERS 2002, L.P.

By: Alloy Ventures 2002, LLC
its General Partner

By: /s/ Craig C. Taylor

Name: Craig C. Taylor

Title: Managing Member of Alloy Ventures 2002 LLC
Managing Member of Alloy Partners 2002, L.P.
and Alloy Ventures 2002, L.P.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Bruce Burrows

BRUCE BURROWS

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

ROBERT F. KORNEGAY, JR. REVOCABLE TRUST U/D/T DATED MAY 27, 2004, ROBERT F. KORNEGAY, JR., TRUSTEE

By: /s/ Robert F. Kornegay

Name: Robert F. Kornegay

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

ALLIANCEBERNSTEIN VENTURE FUND I, L.P.

By: AllianceBernstein ESG Venture Management, L.P., its general partner

By: AllianceBernstein Global Derivatives Corporation, its general partner

By: /s/ Mona Bhalla

Name: Mona Bhalla

Title: Vice President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

SIGHTLINE HEALTHCARE FUND III, L.P.

By: /s/ Maureen Harder

Name: Maureen Harder

Title: Managing Director

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

CROSS CREEK CAPITAL, L.P.

By: Cross Creek Capital GP, L.P.,
its Sole General Partner

By: Cross Creek Capital, LLC,
its Sole General Partner

By: Wasatch Advisors, Inc.,
its Sole Member

By: /s/ Daniel Thurber

Name: Daniel Thurber

Title: Vice President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

CROSS CREEK CAPITAL EMPLOYEES' FUND, L.P.

By: Cross Creek Capital GP, L.P.,
its Sole General Partner

By: Cross Creek Capital, LLC,
its Sole General Partner

By: Wasatch Advisors, Inc.,
its Sole Member

By: /s/ Daniel Thurber

Name: Daniel Thurber

Title: Vice President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

WASATCH FUNDS, INC.
Wasatch Small Cap Growth Fund

By: Wasatch Advisors, Inc.,
its Investment Adviser

By: /s/ Daniel Thurber

Name: Daniel Thurber

Title: Vice President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

SMALLCAP WORLD FUND, INC.

By: Capital Research and Management Company,
its investment adviser

By: /s/ Michael J. Downer

Name: Michael J. Downer

Title: Senior Vice President and Secretary

Approved for Signature
by CRMC Legal Dept. L2C

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

IN-Q-TEL, INC.

By: /s/ Matt Strottman

Name: Matt Strottman

Title: CFO

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

LEERINK SWANN HOLDINGS, LLC

By: /s/ [Illegible]

Name: _____

Title: _____

LEERINK SWANN CO-INVESTMENT FUND, LLC

By: /s/ Joseph R. Gentile

Name: Joseph R. Gentile

Title: Management & Committee Member

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

TECHNOGEN LIQUIDATING TRUST

By: /s/ Isaac Stein

Name: Isaac Stein

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

MARKWELL PARTNERS

By: /s/ [Illegible]

Name: [Illegible]

Title: Managing Partner

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

KILEY REVOCABLE TRUST

By: /s/ Thomas D. Kiley

Name: Thomas D. Kiley

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

STANLEY D. HAYDEN, AND HIS SUCCESSOR(S), AS THE TRUSTEE OF THE STANLEY D. HAYDEN FAMILY TRUST

By: /s/ Stanley D. Hayden

Name: Stanley D. Hayden

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

J.F. SHEA CO., INC. AS NOMINEE 1999-114

By: /s/ Ronald L. Lakey

Name: Ronald L. Lakey

Title: Vice President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Fredrick Stern

FREDRICK STERN

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ George S. Taylor

GEORGE S. TAYLOR

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ James W. Larrick M.D.

JAMES W. LARRICK M.D.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Stephen L. Parry

STEPHEN L. PARRY

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Thomas J. Parry

THOMAS J. PARRY

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Peter B. Dervan

PETER B. DERVAN

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ John M. Harland

JOHN M. HARLAND

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Matthew Frank

MATTHEW FRANK

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Alejandro Berenstein M.D.

ALEJANDRO BERENSTEIN M.D.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Patrick Tenney

PATRICK TENNEY

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Herbert L. Heyneker

HERBERT L. HEYNEKER

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

STEPHEN J. WEISS AND URSULA G. WEISS, TRUSTEES OF THE WEISS FAMILY TRUST 1996 TRUST

By: /s/ Stephen J. Weiss

Name: Stephen J. Weiss

Title: Trustee

/s/ Stephen J. Weiss

STEPHEN J. WEISS

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Paul Machle

PAUL MACHLE

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Fred St. Goar

FRED ST. GOAR

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Gary R. Bang

GARY R. BANG

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Michael H. McKay

MICHAEL H. MCKAY

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Alfred J. Mandel

ALFRED J. MANDEL

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Peter S. Heinecke

PETER S. HEINECKE

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Pauline van Ysendoorn

PAULINE VAN YSENDOORN

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ Erik Van Der Burg

ERIK VAN DER BURG

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

CLARK-BOYD FAMILY TRUST

By: /s/ Kenneth A. Clark

Name: _____

Title: _____

Kenneth A. Clark

KENNETH A. CLARK

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

ANALIZA, INC.

By: /s/ Arnon Chait

Name: Arnon Chait

Title: President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

/s/ John E. Strobeck PhD M.D.

JOHN E. STROBECK PHD M.D.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

ADVISORY TRUST COMPANY OF DELAWARE, CUSTODIAN FOR SANDRA KAY ROTH IRA

By: /s/ Ramona Cisneros

Name: Ramona Cisneros

Title: Trust Administrator

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

NR07, LLC

By: /s/ Sumner Rosenberg

Name: Sumner Rosenberg

Title: Manager

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

TTC FUND I, LLC

By: /s/ Philip H. Albert

Name: Philip H. Albert

Title:

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

ERIK T. ENGELSON, TRUSTEE OF THE ERIK T. ENGELSON TRUST UTD DATED MARCH 29, 2000

By: /s/ Erik T. Engelson

Name: Erik T. Engelson

Title: Trustee

ERIK T. ENGELSON, TRUSTEE OF THE ELISABETH NORTH KUECHLER ENGELSON TRUST UTA DATED JANUARY 17, 2001

By: /s/ Erik T. Engelson

Name: Erik T. Engelson

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

ROBERT D. MCCULLOCH AND KATHLEEN M. MCCULLOCH, TRUSTEES OR THEIR SUCCESSOR(S) OF THE ROBERT D. MCCULLOCH AND KATHLEEN M. MCCULLOCH FAMILY TRUST DATED NOVEMBER 19, 1997

By: /s/ Robert McCulloch

Name: Robert McCulloch

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

ADVISORY TRUST COMPANY OF DELAWARE, CUSTODIAN FOR FRANK RUDERMAN ROTH IRA

By: /s/ Ramona Cisneros

Name: Ramona Cisneros

Title: Trust Administrator

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

THE CONDON FAMILY TRUST

By: /s/ Thomas J. Condon

Name: Thomas J. Condon

Title: TTE

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

HEALTH CARE ADMINISTRATION COMPANY

By: /s/ Gary L. Bowers

Name: Gary L. Bowers

Title: President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

GLAXOSMITHKLINE LLC

By: /s/ William J. Mosher

Name: William J. Mosher

Title: Vice President & Secretary

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

BURWEN FAMILY TRUST U/D/T DATED 9/30/88

By: /s/ David M. Burwen

Name: David M. Burwen

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

MICHAEL J. REARDON TRUST AGREEMENT DATED JUNE 5, 1996

By: /s/ Michael J. Reardon

Name: Michael J. Reardon

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

HENRY P. MASSEY, JR. TTEE MASSEY FAMILY TRUST U/A DTD 7/06/88

By: /s/ Henry P. Massey, Jr.

Name: Henry P. Massey, Jr.

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

THE V FOUNDATION FOR CANCER RESEARCH

By: /s/ Nick Valvano

Name: Nick Valvano

Title: CEO

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

LEO J. PARRY, JR. AND ROBERTA J. PARRY TTEES
PARRY FAMILY REVOCABLE TRUST DTD 01/22/97

By: /s/ Leo J. Parry, Jr. and Roberta J. Parry

Name: Leo J. Parry, Jr. and Roberta J. Parry

Title: Trustees

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

WILLIAM S. BROWN AND BARBARA G. BROWN, OR THEIR SUCCESSORS, AS TRUSTEES OF THE BROWN FRT DTD 3/10/99

By: /s/ William S. Brown

Name: William S. Brown

Title: Co-Trustee

By: /s/ Barbara G. Brown

Name: Barbara G. Brown

Title: Co-Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PURCHASERS:

2008 STEPHEN RONALD QUAKE AND ATHINA PEIOU-QUAKE REVOCABLE TRUST DATED AUGUST 14, 2008

By: /s/ Stephen Quake

Name: Stephen Quake

Title:

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

EXHIBIT A

SCHEDULE OF PURCHASERS

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
ARTEMIS HEALTH, INC. Address for all notices: 1531 Industrial Road San Carlos, CA 94070 Attn: Richard Rava	535,714	$7,499,996.00	—	$7,499,996.00
ALLIANCEBERNSTEIN VENTURE FUND I, L.P. Address for all notices: AllianceBernstein ESG Venture Management, L.P. 1345 Avenue of the Americas New York, NY 10105 Attn: Greg Raskin	17,590	—	$246,260.00	$246,260.00
ALLOY PARTNERS 2002, L.P. Address for all notices: Alloy Ventures 400 Hamilton Avenue 4th Floor Palo Alto, CA 94301 Attn: Michael W. Hunkapiller	657	—	$9,198.00	$9,198.00
ALLOY VENTURES 2002, L.P. Address for all notices: Alloy Ventures 400 Hamilton Avenue 4th Floor Palo Alto, CA 94301 Attn: Michael W. Hunkapiller	24,356	—	$340,984.00	$340,984.00
ALLOY VENTURES 2005, L.P. Address for all notices: Alloy Ventures 400 Hamilton Avenue 4th Floor Palo Alto, CA 94301 Attn: Michael W. Hunkapiller	25,013	—	$350,182.00	$350,182.00

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
BIOMEDICAL SCIENCES INVESTMENT FUND PTE LTD Address for all notices: c/o Economic Development Board (EDB) Biomedical Sciences Group 250 North Bridge Road #20-02 Raffles City Tower Singapore 179101 Attn: Laura Chang With a copy to: Mun Yew Wong 250A Twin Dolphin Drive Redwood City, CA 94065	120,743	—	$1,690,402.00	$1,690,402.00
BRUCE BURROWS Address for all notices: P.O. Box 802948 Santa Clarita, CA 91380-2948	48,213	—	$674,982.00	$674,982.00
EUCLIDSR BIOTECHNOLOGY PARTNERS, L.P. Address for all notices: EuclidSR Partners 45 Rockefeller Plaza Suite 1410 New York, NY 10111 Attn: Raymond Whitaker	32,829	—	$459,606.00	$459,606.00
EUCLIDSR PARTNERS, L.P. Address for all notices: EuclidSR Partners 45 Rockefeller Plaza Suite 1410 New York, NY 10111 Attn: Raymond Whitaker	32,829	—	$459,606.00	$459,606.00
INTERWEST PARTNERS VII, L. P. Address for all notices: 2710 Sand Hill Road Second Floor Menlo Park, CA 94025 Attn: Michael Sweeney	48,306	—	$676,284.00	$676,284.00
INTERWEST INVESTORS VII, L.P. Address for all notices: 2710 Sand Hill Road Second Floor Menlo Park, CA 94025 Attn: Michael Sweeney	2,313	—	$32,382.00	$32,382.00

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
IN-Q-TEL, INC. Address for all notices: 2107 Wilson Blvd. Suite 1100 Arlington, VA 22201 Attn: Brian Smith	3,770	—	$52,780.00	$52,780.00
FIDELITY CONTRAFUND: FIDELITY ADVISOR NEW INSIGHTS FUND Address for all notices: Fidelity Investments 82 Devonshire Street Suite V13H Boston, MA 02109 Attn: Andrew Boyd	6,448	—	$90,272.00	$90,272.00
FIDELITY CONTRAFUND: FIDELITY CONTRAFUND Address for all notices: Fidelity Investments 82 Devonshire Street Suite V13H Boston, MA 02109 Attn: Andrew Boyd	58,835	—	$823,690.00	$823,690.00
VARIABLE INSURANCE PRODUCTS FUND II: CONTRAFUND PORTFOLIO Address for all notices: Fidelity Investments 82 Devonshire Street Suite V13H Boston, MA 02109 Attn: Andrew Boyd	18,481	—	$258,734.00	$258,734.00
SMALLCAP WORLD FUND, INC. Address for all notices: c/o Capital Research and Management Co. 333 S. Hope Street, 55th Floor Los Angeles, CA 90071 Attn: Walt Burkley	58,685	—	$821,590.00	$821,590.00
VERSANT AFFILIATES FUND 1-A, L.P. Address for all notices: 3000 Sand Hill Road Bldg. 4, Suite 210 Menlo Park, CA 94025 Attn: Samuel Colella	1,322	—	$18,508.00	$18,508.00
VERSANT AFFILIATES FUND 1-B, L.P. Address for all notices: 3000 Sand Hill Road Bldg. 4, Suite 210 Menlo Park, CA 94025 Attn: Samuel Colella	3,902	—	$54,628.00	$54,628.00

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
VERSANT SIDE FUND I, L.P. Address for all notices: 3000 Sand Hill Road Bldg. 4, Suite 210 Menlo Park, CA 94025 Attn: Samuel Colella	1,503	—	$21,042.00	$21,042.00
VERSANT VENTURE CAPITAL I, L.P. Address for all notices: 3000 Sand Hill Road Bldg. 4, Suite 210 Menlo Park, CA 94025 Attn: Samuel Colella	72,079	—	$1,009,106.00	$1,009,106.00
LEHMAN BROTHERS HEALTHCARE VENTURE CAPITAL, L.P. Address for all notices: 1271 Sixth Avenue 4th Floor New York, NY 10020 Attn: Faruk K. Amin	12,376	—	$173,264.00	$173,264.00
LEHMAN BROTHERS OFFSHORE PARTNERSHIP ACCOUNT 2000/2001, L.P. Address for all notices: 1271 Sixth Avenue 4th Floor New York, NY 10020 Attn: Faruk K. Amin	2,768	—	$38,752.00	$38,752.00
LEHMAN BROTHERS P.A., LLC Address for all notices: 1271 Sixth Avenue 4th Floor New York, NY 10020 Attn: Faruk K. Amin	23,689	—	$331,646.00	$331,646.00
LEHMAN BROTHERS PARTNERSHIP ACCOUNT 2000/2001, L.P. Address for all notices: 1271 Sixth Avenue 4th Floor New York, NY 10020 Attn: Faruk K. Amin	10,673	—	$149,422.00	$149,422.00
LILLY BIOVENTURES, ELI LILLY & COMPANY Address for all notices: Lilly Ventures 115 W. Washington Suite 1680 Indianapolis, 46204 Attn: Ed Torres	27,846	—	$389,844.00	$389,844.00

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
CROSS CREEK EMPLOYEES' FUND, L.P. Address for all notices: 150 Social Hall Avenue 4th Floor Salt Lake City, UT 84111 Attn: Karey Barker	749	—	$10,486.00	$10,486.00
CROSS CREEK CAPITAL, L.P. Address for all notices: 150 Social Hall Avenue 4th Floor Salt Lake City, UT 84111 Attn: Karey Barker	7,627	—	$106,778.00	$106,778.00
WASATCH FUNDS, INC. Address for all notices: 150 Social Hall Avenue 4th Floor Salt Lake City, UT 84111 Attn: Karey Barker	8,376	—	$117,264.00	$117,264.00
INVUS, L.P. Address for all notices: The Invus Group, LLC 750 Lexington Avenue 30th Floor New York, NY 10022 Attn: Philippe Amouyal	23,933	—	$335,062.00	$335,062.00
SIGHTLINE HEALTHCARE FUND III, L.P. Address for all notices: 50 S. Sixth Street, Suite 1390 Minneapolis, MN 55402 Attn: Buzz Benson	18,164	—	$254,296.00	$254,296.00
GENERAL ELECTRIC CAPITAL CORPORATION Address for all notices: 500 W. Monroe 14th Floor Chicago, IL 60661 Attn: Brent Shepherd	11,841	—	$165,774.00	$165,774.00
TECHNOGEN LIQUIDATING TRUST Address for all notices: 61 Monte Vista Avenue Atherton, CA 94027 Attn: Isaac Stein	5,270	—	$73,780.00	$73,780.00

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
ABT HOLDING COMPANY Address for all notices: 3201 Carnegie Avenue Cleveland, OH 44115-2634 Attn: Laura Campbell	998	—	$13,972.00	$13,972.00
OCULUS PHARMACEUTICALS, INC. Address for all notices: 3201 Carnegie Avenue Cleveland, OH 44115-2634 Attn: Laura Campbell	1,363	—	$19,082.00	$19,082.00
KILEY REVOCABLE TRUST Address for all notices: 986 Baileyana Road Hillsborough, CA 94010 Attn: Thomas D. Kiley	1,920	—	$26,880.00	$26,880.00
HEALTH CARE ADMINISTRATION COMPANY Address for all notices: 845 Proton Road San Antonio, TX 78258 Attn: Gary Bowers	1,195	—	$16,730.00	$16,730.00
JACARANDA PARTNERS Address for all notices: 427 South Marengo Avenue Bungalow No. 3 Pasadena, CA 91101 Attn: Michael Dooling	913	—	$12,782.00	$12,782.00
BURWEN FAMILY TRUST U/D/T DATED 9/30/08 Address for all notices: 1114 Blue Lake Square Mountain View, CA 94040 Attn: David M. Burwen	781	—	$10,934.00	$10,934.00
THE V FOUNDATION FOR CANCER RESEARCH Address for all notices: 3106 Towerview Court Cary, NC 27513 Attn: Nick Valvano	323	—	$4,522.00	$4,522.00
JOHN M. HARLAND Address for all notices: 25 Woodmill Drive Redwood City, CA 94061	591	—	$8,274.00	$8,274.00
HEATH LUKATCH Address for all notices: 303 Grandview Drive Woodside, CA 94062-4386	332	—	$4,648.00	$4,648.00

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
DWAYNE HARDY Address for all notices: 5005 Citadel Court Granite Bay, CA 95746	369	—	$5,166.00	$5,166.00
PATRICK TENNEY Address for all notices: 20 Turtle Rock Court Tiburon, CA 94920	3,694	—	$51,716.00	$51,716.00
HERBERT L. HEYNEKER Address for all notices: 2244 Steiner Street San Francisco, CA 94115	207	—	$2,898.00	$2,898.00
STEPHEN J. WEISS Address for all notices: 101 Ash Court Los Gatos, CA 95032	58	—	$812.00	$812.00
STEPHEN J. WEISS AND URSULA G. WEISS, TRUSTEES OF THE WEISS FAMILY 1996 TRUST Address for all notices: 101 Ash Court Los Gatos, CA 95032 Attn: Stephen J. Weiss	134	—	$1,876.00	$1,876.00
BRADFORD S. GOODWIN AND CATHY W. GOODWIN AS TRUSTEES OF THE GOODWIN FAMILY TRUST U/A/D 7/30/97 Address for all notices: 216 Amherst Avenue San Mateo , CA 94402 Attn: Brad Goodwin	369	—	$5,166.00	$5,166.00
ERIK T. ENGELSON, TRUSTEE OF THE ERIK T. ENGELSON TRUST U/T/D DATED MARCH 29, 2000 Address for all notices: The Foundry 199 Jefferson Drive Menlo Park, CA 94025 Attn: Erik T. Engelson	591	—	$8,274.00	$8,274.00
ERIK T. ENGELSON, TRUSTEE OF THE ELISABETH NORTH KUECHLER ENGELSON TRUST UTA DATED JANUARY 17, 2001 Address for all notices: The Foundry 199 Jefferson Drive Menlo Park, CA 94025 Attn: Erik T. Engelson	295	—	$4,130.00	$4,130.00

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
PAUL MACHLE Address for all notices: 1048 Monterey Blvd. San Francisco, CA 94127	175	—	$2,450.00	$2,450.00
PETER S. HEINECKE Address for all notices: 30 Hill Street San Francisco, CA 94110	86	—	$1,204.00	$1,204.00
ROBERT F. KORNEGAY, JR. REVOCABLE TRUST U/D/T DATED MAY 27, 2004, ROBERT F. KORNEGAY, JR. TRUSTEE Address for all notices: 650 Page Mill Road Palo Alto, CA 94304 Attn: Robert F. Kornegay, Jr.	73	—	$1,022.00	$1,022.00
ERIK VAN DER BURG Address for all notices: 16417 Peacock Lane Los Gatos, CA 95032	46	—	$644.00	$644.00
TIMOTHY P. LYNCH Address for all notices: 1422 NW 1st Street Bend, OR 97701	7,388	—	$103,432.00	$103,432.00
FRED ST. GOAR Address for all notices: 800 Ringwood Avenue Menlo Park, CA 94025	121	—	$1,694.00	$1,694.00
MICHAEL MCKAY Address for all notices: 536 Walnut Street Newton, MA 02460	103	—	$1,442.00	$1,442.00
J.F. SHEA CO., INC., A NOMINEE 1999-114 Address for all notices: 655 Brea Canyon Road Walnut, CA 91789 Attn: Victoria Petrosian	1,481	—	$20,734.00	$20,734.00
WILLIAM S. BROWN AND BARBARA G. BROWN, OR THEIR SUCCESSORS, AS TRUSTEES OF THE BROWN FRT DTD 3/10/99 Address for all notices: P.O. Box 392 Murphys, CA 95247-0392	389	—	$5,446.00	$5,446.00

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
NR07, LLC Address for all notices: c/o Ballard Spahr LLP 999 Peachtree Street Suite 1000 Atlanta, GA 30309 Attn: Sumner Rosenberg	259	—	$3,626.00	$3,626.00
TTC FUND I, LLC Address for all notices: c/o Townsend & Townsend & Crew, LLP 379 Lytton Avenue Palo Alto, CA 94301-1479 Attn: Philip H. Albert	233	—	$3,262.00	$3,262.00
PAT AND BETSY COLLINS REVOCABLE TRUST Address for all notices: 500 Newport Center Drive #910 Newport Beach, CA 92660	1,634	—	$22,876.00	$22,876.00
ALEJANDRO BERENSTEIN, M.D. Address for all notices: 15 Central Park West #16G New York, NY 10023	239	—	$3,346.00	$3,346.00
MARKWELL PARTNERS Address for all notices: c/o Professor Daniel Markovit Yale Law School P.O. Box 208215 New Haven, CT 06520-8215	2,426	—	$33,964.00	$33,964.00
DAVID SCOTT FRAMPTON AND GAJA ROBERTA FRAMPTON, AS TRUSTEES OF THE FRAMPTON FAMILY TRUST DTD 4/25/03 Address for all notices: 147 Carmel Way Portola Valley, CA 94028 Attn: David Frampton	2,059	—	$28,826.00	$28,826.00
LEERINK SWANN CO-INVESTMENT FUND, LLC Address for all notices: One Federal Street 37th Floor Boston, MA 02110 Attn: Donald Notman and Jessica Glick	1,055	—	$14,770.00	$14,770.00

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
LEERINK SWANN HOLDINGS, LLC Address for all notices: One Federal Street 37th Floor Boston, MA 02110 Attn: Jessica Glick	837	—	$11,718.00	$11,718.00
STANLEY D. HAYDEN, AND HIS SUCCESSOR(S), AS THE TRUSTEE OF THE STANLEY D. HAYDEN FAMILY TRUST Address for all notices: 110 W. Las Tunas Drive Suite A San Gabriel, CA 91776 Attn: Stanley D. Hayden	1,634	—	$22,876.00	$22,876.00
JONATHAN S. HOOT AND ANDREA T. HOOT, TRUSTEES OF THE HOOT FAMILY REVOCABLE TRUST DTD 3/16/99 Address for all notices: 567 24th Street Hermosa Beach, CA 90254 Attn: Jonathan Hoot	481	—	$6,734.00	$6,734.00
EDWARD R. LEMOURE Address for all notices: 16425 Collins Avenue Sunny Isles Beach, FL 33140	1,368	—	$19,152.00	$19,152.00
THE CONDON FAMILY TRUST Address for all notices: 850 Holladay Road San Marino, CA 91108 Attn: Thomas J. Condon and Julie Condon	1,353	—	$18,942.00	$18,942.00
FREDRICK STERN Address for all notices: 5068 Shirley Avenue Tarzana, CA 91356	950	—	$13,300.00	$13,300.00
NEWMAN FAMILY INVESTMENT PARTNERSHIP Address for all notices: 1852 Westview Road Charlottesville, VA 22903 Attn: Robert Newman	873	—	$12,222.00	$12,222.00
MICHAEL J. REARDON TRUST AGREEMENT DATED JUNE 5, 1996 Address for all notices: 1915 Windridge Drive Lake Forest, IL 60045	779	—	$10,906.00	$10,906.00

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
JOHN E. STOBECK, PHD, M.D. Address for all notices: 16 Normandy Court Ho-Ho-Kus, NJ 07423-1217	779	—	$10,906.00	$10,906.00
GEORGE S. TAYLOR Address for all notices: 476 Border Hill Road Los Altos, CA 94024	572	—	$8,008.00	$8,008.00
FERGUSON/EGAN FAMILY TRUST DATED 6/28/99 Address for all notices: 2455 Summit Drive Hillsborough, CA 94010 Attn: Rodney A. Ferguson	562	—	$7,868.00	$7,868.00
WILLIAM L. CATON III, M.D. Address for all notices: 630 S. Raymond Avenue Unit 330 Pasadena, CA 91105-3206 Attn: Cathy Caton	508	—	$7,112.00	$7,112.00
JAMES W. LARRICK, M.D. Address for all notices: 1230 Bordeaux Drive Sunnyvale, CA 94089	481	—	$6,734.00	$6,734.00
HENRY P. MASSEY, JR., TRUSTEE OF THE MASSEY FAMILY TRUST UDT DATED JULY 6, 1988 Address for all notices: 27741 Via Cero Gordo Los Altos Hills, CA 94027 Attn: Henry P. Massey	738	—	$10,332.00	$10,332.00
LEO J. PARRY, JR. AND ROBERTA J. PARRY, TTEES PARRY FAMILY REVOCABLE TRUST DTD 01/22/97 Address for all notices: 9967 Mangos Drive San Ramon, CA 94583	259	—	$3,626.00	$3,626.00
STEPHEN L. PARRY Address for all notices: 1508 Whispering Oak Way Pleasanton, CA 94566	389	—	$5,446.00	$5,446.00
THOMAS J. PARRY Address for all notices: 25151 Canyon Oaks Court Castro Valley, CA 94552	389	—	$5,446.00	$5,446.00

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
PETER B. DERVAN Address for all notices: 1235 St. Albans Road San Marino, CA 91108	335	—	$4,690.00	$4,690.00
MATTHEW FRANK Address for all notices: 2995 Woodside Road Suite 400 Woodside, CA 94062	266	—	$3,724.00	$3,724.00
RHETT E. BROWN Address for all notices: 205 E. 76th Street Apt. 7 New York, NY 10021	167	—	$2,338.00	$2,338.00
ALLAN MAY, TRUSTEE INTERVIVOS TRUST DATED 5/14/91 Address for all notices: 455 Woodside Road Woodside, CA 94062	134	—	$1,876.00	$1,876.00
ROBERT D. MCCULLOCH AND KATHLEEN M. MCCULLOCH, TRUSTEE OR THEIR SUCCESSOR(S) OF THE ROBERT D. MCCULLOCH AND KATHLEEN M. MCCULLOCH FAMILY TRUST DATED NOVEMBER 19, 1997 Address for all notices: 21324 Dexter Drive Cupertino, CA 95014	147	—	$2,058.00	$2,058.00
GARY R. BANG Address for all notices: P.O. Box 1925 Carmel, CA 93921	119	—	$1,666.00	$1,666.00
PAULINE VAN YSENDOORN Address for all notices: 132 Locust Street San Francisco, CA 94118	85	—	$1,190.00	$1,190.00
ADVISORY TRUST COMPANY OF DELAWARE, CUSTODIAN FOR SANDRA KAY ROTH IRA Address for all notices: 15 W. Santa Inez San Mateo, CA 94402 Copies to: Advisory Trust Company P.O. Box 52129 Phoenix, AZ 85017-2129 Attn: Ramona Cisneros	64	—	$896.00	$896.00

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
ADVISORY TRUST COMPANY OF DELAWARE, CUSTODIAN FOR FRANK RUDERMAN ROTH IRA Address for all notices: 71 Creekside Drive San Rafael, CA 94903 Copies to: Advisory Trust Company P.O. Box 52129 Phoenix, AZ 85017-2129 Attn: Ramona Cisneros	64	—	$896.00	$896.00
KENNETH A. CLARK Address for all notices: c/o WSGR 650 Page Mill Road Palo Alto, CA 94034	38	—	$532.00	$532.00
CLARK/BOYD TRUST Address for all notices: c/o WSGR 650 Page Mill Road Palo Alto, CA 94034	35	—	$490.00	$490.00
JAMES H. EBERWINE PHD Address for all notices: 3918 Howry Philadelphia, PA 19129	13	—	$182.00	$182.00
2008 STEPHEN RONALD QUAKE AND ATHINA PEIOU-QUAKE REVOCABLE TRUST DATED AUGUST 14, 2008 Address for all notices: 636 Alvarado Row Stanford, CA 94305	7,388	—	$103,432.00	$103,432.00
WS INVESTMENT COMPANY, LLC (2009A) Address for all notices: c/o WSGR 650 Page Mill Road Palo Alto, CA 94034	792	—	$11,088.00	$11,088.00
WS INVESTMENT COMPANY, LLC (2009C) Address for all notices: c/o WSGR 650 Page Mill Road Palo Alto, CA 94034	264	—	$3,696.00	$3,696.00

Name and Address of Purchaser	Number of Series E Shares	Cash Investment Amount	Outstanding Indebtedness Converted	Total Purchase Price
GLAXOSMITHKLINE LLC Address for all notices: One Franklin Plaza 200 N. 16th Street, FP 2355 Philadelphia, PA 19102 Attn: William J. Mosher	1,105	—	$15,470.00	$15,470.00
GLAXO GROUP LIMITED Address for all notices: c/o Secretariat Services 980 Great West Road Brentford, Middlesex TW8 9GS United Kingdom Attn: Victoria A. Whyte	904	—	$12,656.00	$12,656.00
ALFRED J. MANDEL Address for all notices: 915 Cowper Street Palo Alto, CA 94301-2850	91	—	$1,274.00	$1,274.00
ANALIZA, INC. Address for all notices: 26101 Miles Road Cleveland, OH 44128-5933 Attn: Dr. Arnon Chait	10	—	$140.00	$140.00
TOTAL	**1,323,773**	**$7,499,996.00**	**$11,032,826.00**	**$18,532,822.00**

EXHIBIT B

FORM OF THIRD AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

Superseded by Exhibit 3.1 to the registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on December 3, 2010.

EXHIBIT C

FORM OF NINTH AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

Incorporated by reference to Exhibit 4.[3] to the registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on December 3, 2010.

EXHIBIT D

FORM OF LEGAL OPINION

Intentionally omitted.

Exhibit 4.5

EXECUTION COPY

FLUIDIGM CORPORATION

NINTH AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

November 16, 2009

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NINTH AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

THIS NINTH AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT (this "**Agreement**") is entered into as of November 16, 2009 by and among Fluidigm Corporation, a Delaware corporation (the "**Company**"), the persons set forth on Exhibit A hereto (the "**New Investors**"), the persons set forth on the Schedule of Founders attached hereto as Exhibit B (the "**Founders**"), and the persons set forth on Exhibit C hereto (the "**Prior Investors**"). The Prior Investors and the New Investors are referred to herein collectively as the "**Investors**."

RECITALS

WHEREAS, the Company and the New Investors have entered into a Series E Preferred Stock Purchase Agreement of even date herewith, as amended from time to time (such agreement, as amended from time to time, the "**2009 Purchase Agreement**"), pursuant to which the Company shall sell, and the New Investors shall acquire, shares of the Company's Series E Preferred Stock;

WHEREAS, the Company has granted certain registration rights and other rights to the Founders and the Prior Investors pursuant to that certain Eighth Amended and Restated Investor Rights Agreement dated June 13, 2006, as amended December 22, 2006, as further amended October 10, 2007, and as further amended September 15, 2008 (the "**Prior Agreement**"); and

WHEREAS, as an inducement to the New Investors to purchase shares of the Company's Series E Preferred Stock pursuant to the 2009 Purchase Agreement, the Company, the Prior Investors and the Founders desire to amend and restate the Prior Agreement to allow the New Investors to become a party to this Agreement.

NOW, THEREFORE, in consideration of the mutual promises and covenants hereinafter set forth, the parties agree as follows:

SECTION 1

Restrictions on Transferability; Registration Rights

1.1 Certain Definitions. As used in this Agreement, the following terms shall have the following meanings:

"**Affiliate**" shall have the meaning set forth in Rule 405 of the Securities Act; provided that the definition of "Affiliate" shall also include (i) any general partner, officer or director of such person, (ii) any private equity or venture capital fund now or hereafter existing (a "**Fund**") for which such person or an Affiliate of such person is a general partner or management company, and (iii) if such person is a Fund, any other Fund that is directly or indirectly controlled by or under common control with one or more general partners of such person, or that shares the same management company with such person or an Affiliated management company.

"**Commission**" shall mean the Securities and Exchange Commission or any other federal agency at the time administering the Securities Act.

"**Eligible Securities**" shall mean (i) the Series A Preferred Stock issued pursuant to the Series A Preferred Stock Purchase Agreement dated December 1, 1999; (ii) the Series B Preferred Stock issued pursuant to the Series B Preferred Stock Purchase Agreement dated July 5, 2000; (iii) the Series C Preferred Stock issued pursuant to the Series C Preferred Stock Purchase Agreement dated October 23, 2001; (iv) the Series C Preferred Stock issued pursuant to the Series C Preferred Stock Purchase Agreement dated November 1, 2002; (v) the Series C Preferred Stock issued pursuant to the Series C Preferred Stock and Warrant Purchase Agreement dated September 22, 2003; (vi) the Series D Preferred Stock issued pursuant to the Series D Preferred Stock Purchase Agreement dated December 18, 2003; (vii) the Series D Preferred Stock issued pursuant to the Series D Preferred Stock Purchase Agreement dated August 16, 2005; (viii) the Series D Preferred Stock issued upon conversion of convertible promissory note(s) issued pursuant to the Convertible Promissory Note Purchase Agreement (the "**CNPA**") dated December 18, 2003, as amended by Amendment No. 1 to Convertible Note Purchase Agreement dated December 17, 2004, between the Company and Biomedical Sciences Investment Fund Pte Ltd (the "**BMSIF**"); (ix) the Series D Preferred Stock issued upon conversion of convertible promissory note(s) issued in connection with the Convertible Note Agreement (the "**CNA**") dated December 18, 2003, between the Company and Invus, L.P. (the "**Invus**"); (x) the Series E Preferred Stock issued pursuant to the Series E Preferred Stock Purchase Agreement dated June 13, 2006, as amended (the "**Prior Purchase Agreement**"); (xi); the Series E Preferred Stock issued pursuant to the 2009 Purchase Agreement; (xii) all Securities acquired by any Investor pursuant to the rights of first offer described in Sections 3 or 4 of this Agreement; and (xiii) any Securities issued with respect to the foregoing upon any stock split, stock dividend, recapitalization, or similar event or upon any exercise or conversion, as applicable.

"**Exchange Act**" shall mean the Securities Exchange Act of 1934, as amended, or any similar federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"**Founders Shares**" shall mean the shares of Common Stock of the Company issued to the Founders as of the date of this Agreement or at any time in the future.

"**Holder**" shall mean (i) any Investor and any person to whom registration rights under this Agreement have been transferred in accordance with Section 1.13 hereof, (ii) for the purposes of Section 1.6 (and other portions of this Section 1, to the extent they relate to rights of registration under Section 1.6), any Founder or holder of Other Shares and (iii) for the purposes of Sections 1.5, 1.6 and 1.7 (and other portions of this Section 1, to the extent they relate to rights of registration under Sections 1.5, 1.6 and 1.7), Warrantholders.

"**Initial Public Offering**" shall mean the first sale of Securities of the Company pursuant to an effective registration statement under the Securities Act.

"**Initiating Holders**" shall mean Holders who in the aggregate hold a majority of the Registrable Securities then held by Holders assuming conversion or exercise, as applicable, of all Eligible Securities.

"**Lighthouse Preferred Warrants**" shall mean (i) the Preferred Stock Purchase Warrant, dated March 29, 2005, pursuant to which Lighthouse Capital Partners V, L.P. ("**Lighthouse**") may purchase shares of the Company's authorized Series D Preferred Stock; (ii) the

Preferred Stock Purchase Warrant, dated February 15, 2008, pursuant to which Lighthouse may purchase shares of the Company's authorized Series E Preferred Stock; and (iii) the Preferred Stock Purchase Warrant, dated March 25, 2009, pursuant to which Lighthouse may purchase shares of the Company's authorized Series E Preferred Stock.

"**Other Shares**" shall mean the shares of Common Stock of the Company issued pursuant to the Common Stock Purchase Agreements dated July 17, 2001 and February 2005 by and between the Company and President and Fellows of Harvard College.

"**Permitted Transferee**" shall mean (i) any general partner or retired general partner of any Holder which is a partnership; (ii) any family member of a Holder or trust for the benefit of any individual Holder; (iii) any Investor; (iv) an Affiliate of an Investor; or (v) any transferee who acquires at least 40,000 shares of Eligible Securities.

The terms "**register**," "**registered**" and "**registration**" refer to a registration effected by preparing and filing a registration statement in compliance with the Securities Act, and the declaration or ordering of the effectiveness of such registration statement.

"**Registration Expenses**" shall mean all expenses incurred by the Company in complying with Sections 1.5, 1.6 and 1.7 hereof, including, without limitation, all registration, qualification, stock exchange and filing fees, printing expenses, escrow fees, fees and disbursements of counsel for the Company and accountants and other persons retained by or for the Company (including the fees of one counsel for the Holders, not to exceed $25,000), blue sky fees and expenses, accounting fees and the expense of any special audits incident to or required by any such registration (but excluding the compensation of regular employees of the Company which shall be paid in any event by the Company).

"**Registrable Securities**" means (i) any shares of Common Stock which are Eligible Securities, (ii) any shares of Common Stock issuable upon the exercise or conversion, as applicable, of Eligible Securities, (iii) for the purposes of Section 1.6 (and other portions of this Section 1, to the extent they relate to rights of registration under Section 1.6) any shares of Common Stock which are Founder Shares or Other Shares, and (iv) for the purposes of Sections 1.5, 1.6 and 1.7 (and other portions of this Section 1, to the extent they relate to rights of registration under Sections 1.5, 1.6 and 1.7) any shares of Common Stock which are Warrant Shares; provided, however, that shares of Common Stock shall be treated as Registrable Securities only if and so long as they have not been (A) sold to or through a broker or dealer or underwriter in a public distribution or a public securities transaction, (B) sold in a transaction exempt from the registration and prospectus delivery requirements of the Securities Act under Section 4(1) thereof so that all transfer restrictions and restrictive legends with respect thereto are removed upon the consummation of such sale or (C) sold in a transaction in which the rights granted under this Section 1 are not assigned in accordance with this Agreement.

"**Restricted Securities**" shall mean the securities of the Company required to bear the legends set forth in Section 1.3 hereof.

"**Securities**" shall mean shares of, or securities convertible into or exercisable for any shares of, any class of capital stock of the Company.

"**Securities Act**" shall mean the Securities Act of 1933, as amended, or any similar federal statute and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"**Selling Expenses**" shall mean all underwriting discounts and selling commissions and applicable to the securities registered by the Holders and any fees and disbursements of counsel for the Holders not included in the definition of Registration Expenses.

"**Voting Agreement**" shall mean the Second Amended and Restated Voting Agreement dated August 16, 2005 among the Company and certain stockholders of the Company.

"**Warrant Shares**" shall mean the shares of Common Stock of the Company issued or issuable upon conversion of the (i) Series C Preferred Stock issued or issuable upon exercise or conversion of (A) the warrant to purchase up to 17,500 shares of Series C Preferred Stock issued to TBCC Funding Trust II ("**TBCC**") pursuant to the Master Loan and Security Agreement dated March 27, 2002 by and between the Company and Transamerica Technology Finance Corporation; (B) the warrant to purchase up to 31,008 shares of Series C Preferred Stock issued to General Electric Capital Corporation ("**GE Capital**") in connection with the Master Security Agreement dated as of November 8, 2002, as amended (the "**Master Security Agreement**") by and between the Company and GE Capital; (C) the warrants to purchase an aggregate of up to 90,000 shares of Series C Preferred Stock issued to Glaxo Group Limited ("**GGL**") in connection with the Development Collaboration and License Agreement dated September 22, 2003 (the "**License Agreement**"); and (D) the warrants to purchase an aggregate of up to 110,000 shares of Series C Preferred Stock issued to SmithKline Beecham Corporation ("**SBC**") in connection with the License Agreement; (ii) the Series D Preferred Stock issued or issuable upon exercise or conversion of (A) the warrant to purchase up to 37,500 shares of Series D Preferred Stock dated March 18, 2004 and issued to GE Capital in connection with extensions of credit to the Company; (B) the warrant to purchase up to 380,556 shares of Series D Preferred Stock dated June 30, 2004 and issued to In-Q-Tel, Inc. ("**In-Q-Tel**"); (C) the Lighthouse Preferred Warrants; and (D) the warrant to purchase up to 126,851 shares of Series D Preferred Stock dated June 30, 2004 and issued to In-Q-Tel Employee Fund, LLC ("**Employee Fund**"); and (iii) the Series E Preferred Stock issued or issuable upon exercise or conversion of (A) the Lighthouse Preferred Warrants and (B) the warrants to purchase shares of Preferred Stock of the Company issued to certain Investors under the Note and Warrant Purchase Agreement dated as of August 25, 2009. GGL, SBC, TBCC, GE Capital, In-Q-Tel, Employee Fund, and Lighthouse are collectively referred to herein as "**Warrantholders**."

"**Worthington Shares**" shall mean the Founder Shares issued to Gajus Worthington or his Affiliates.

1.2 Restrictions. No Restricted Securities shall be sold, assigned, transferred or pledged except upon the conditions specified in this Agreement. Each Holder will cause any proposed purchaser, assignee, transferee or pledgee of its Restricted Securities to agree in writing to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement, including, without limitation, Section 1.14, except where such Restricted Securities would cease to be Restricted Securities in connection with such proposed purchase, assignment, transfer or pledge.

1.3 Restrictive Legend. Each certificate representing Registrable Securities shall (unless otherwise permitted by the provisions of Section 1.4 below) be stamped or otherwise imprinted with a legend in the following form (in addition to any legend required under applicable state securities laws):

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). SUCH SHARES MAY NOT BE SOLD, TRANSFERRED OR PLEDGED IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS THE COMPANY RECEIVES AN OPINION OF COUNSEL (WHICH MAY BE COUNSEL FOR THE COMPANY), OR OTHER EVIDENCE, REASONABLY ACCEPTABLE TO IT STATING THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF THE SECURITIES ACT."

"THE SHARES REPRESENTED BY THIS CERTIFICATE MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY."

"THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A MARKET STAND-OFF AGREEMENT IN THE EVENT OF A PUBLIC OFFERING, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY."

Each Holder consents to the Company making a notation on its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer established in this Section 1.

1.4 Notice of Proposed Transfers. Each Holder of each certificate representing Restricted Securities, by acceptance thereof, agrees to comply in all respects with the restrictions on transfer contained in Sections 1.2, 1.3, 1.4 and 1.14 of this Agreement. Solely for purposes of the foregoing sentence and for the sake of clarification, the term "Holder" shall also include and the term "Restricted Securities" shall also apply to any Founder, holder of Other Shares or Warrantholders. Prior to any proposed sale, assignment, transfer or pledge of any Restricted Securities (other than any transfer not involving a change in beneficial ownership), unless there is in effect a registration statement under the Securities Act covering the proposed transfer, the Holder thereof shall give written notice to the Company of such Holder's intention to effect such transfer, sale, assignment or pledge. Each such notice shall describe the manner and circumstances of the proposed transfer, sale, assignment or pledge in sufficient detail, and shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall be, reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transfer of the Restricted Securities may be effected without registration under the Securities Act and applicable state securities laws, or (ii) a "no action" letter from the Commission to the effect that the transfer of such securities without registration will not result in a recommendation by the staff of the Commission that action be taken with respect thereto, or (iii) any

other evidence reasonably satisfactory to counsel to the Company, whereupon the Holder of such Restricted Securities shall be entitled to transfer such Restricted Securities in accordance with the terms of the notice delivered by the Holder to the Company; provided, however, that no such legal opinion, "no action" letter or other evidence shall be required with respect to a transfer to an Affiliate. Each certificate evidencing the Restricted Securities transferred as above provided shall bear, except if such transfer is made pursuant to Rule 144, the appropriate restrictive legend set forth in Section 1.3 above, except that such certificate shall not bear such restrictive legend if, in the opinion of counsel for such Holder and reasonably acceptable to the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act or this Agreement.

1.5 Requested Registration.

(a) Request for Registration. In case the Company shall receive from Initiating Holders a written request that the Company effect any registration with respect to a public offering of at least 50% of the Registrable Securities, the reasonably anticipated aggregate price to the public of which, net of underwriting discounts and commissions, would exceed $20,000,000, the Company will:

(i) promptly give written notice of the proposed registration to all other Holders; and

(ii) use its best efforts to effect as soon as practicable such registration (including, without limitation, the execution of an undertaking to file post-effective amendments, appropriate qualification under applicable blue sky or other state securities laws and appropriate compliance with applicable regulations issued under the Securities Act and any other governmental requirements or regulations) as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any Holder or Holders joining in such request as are specified in a written request received by the Company within 15 days after receipt of the written notice from the Company; provided, however, that the Company shall not be obligated to take any action to effect any such registration pursuant to this Section 1.5:

(1) Prior to six months following the closing of the Company's Initial Public Offering;

(2) During the period starting with the date 60 days prior to the Company's estimated date of filing of, and ending on the date three months immediately following the effective date of, any registration statement (other than a registration of Securities in a Rule 145 transaction or with respect to an employee benefit plan) pertaining to Securities of the Company (subject to Section 1.6(a) hereof), provided that the Company is actively employing in good faith all reasonable efforts to cause such registration statement to be filed and become effective and that the Company provides the Initiating Holders written notice of its intent to file such registration statement within 30 days of receiving the request for registration from the Initiating Holders and provided further, however, that the Company may not utilize this right more than once in any 12-month period.

(3) After the Company has effected two registrations pursuant to this Section 1.5; or

(4) If the Company shall furnish to such Holders a certificate, signed by the President of the Company, stating that in the good faith judgment of the Board of Directors it would be seriously detrimental to the Company or its stockholders for a registration statement to be filed in the near future, in which case the Company's obligation to use its best efforts to register under this Section 1.5 shall be deferred for a period not to exceed 90 days from the date of receipt of written request from the Initiating Holders; provided, however, that the Company may not utilize this right more than once in any 12-month period.

(b) Underwriting. If the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as part of their request made under Section 1.5(a), and the Company shall so advise the Holders as part of the notice given pursuant to Section 1.5(a)(i). The right of any Holder to registration pursuant to Section 1.5 shall be conditioned upon such Holder's participation in the underwriting arrangements required by this Section 1.5 and the inclusion of such Holder's Registrable Securities in the underwriting, to the extent requested and provided herein.

The Company shall (together with all Holders proposing to distribute their securities through such underwriting) enter into an underwriting agreement in customary form with the managing underwriter selected for such underwriting by the Company and a majority of the Holders. Notwithstanding any other provision of this Section 1.5, if the managing underwriter advises the Company in writing that marketing factors require a limitation of the number of shares to be underwritten, then the Company shall so advise all Holders of Registrable Securities who indicated their intent to participate in the registration in a timely manner, and the number of shares of Registrable Securities that may be included in the registration and underwriting shall be allocated among such Holders in proportion, as nearly as practicable, to the respective number of Registrable Securities held by such Holders at the time of filing the registration statement, provided, however, that the number of shares of Registrable Securities to be included in such underwriting shall not be reduced unless all Worthington Shares, all Other Shares and all other Securities that are not Registrable Securities (other than Securities to be sold for the account of the Company) are first entirely excluded from the underwriting. No Registrable Securities excluded from the underwriting by reason of the underwriter's marketing limitation shall be included in such registration. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares.

If any Holder of Registrable Securities disapproves of the terms of the underwriting, such person may elect to withdraw therefrom by written notice to the Company, the managing underwriter and the Initiating Holders. The Registrable Securities so withdrawn shall also be withdrawn from registration.

1.6 Company Registration.

(a) Notice of Registration. If at any time or from time to time, the Company shall determine to register any Common Stock, either for its own account or the account of a security holder or holders other than (i) a registration relating to employee benefit plans, (ii) a

registration relating to the offer and sale of debt securities, (iii) a registration relating to a Commission Rule 145 transaction, or (iv) a registration pursuant to Sections 1.5 or 1.7 hereof, the Company will:

(i) promptly give to each Holder written notice thereof; and

(ii) include in such registration (and any related qualification under blue sky laws or other compliance), and in any underwriting involved therein, all the Registrable Securities specified in a written request or requests made within 15 days after receipt of such written notice from the Company by any Holder.

(b) Underwriting. If the registration of which the Company gives notice is for a registered public offering involving an underwriting, the Company shall so advise the Holders in a written notice given pursuant to this Section 1.6. In such event, the right of any Holder to registration pursuant to this Section 1.6 shall be conditioned upon such Holder's participation in such underwriting and the inclusion of Registrable Securities in the underwriting to the extent provided herein.

All Holders proposing to distribute their securities through such underwriting shall (together with the Company and the other holders distributing their securities through such underwriting) enter into an underwriting agreement in customary form with the managing underwriter selected for such underwriting by the Company. Notwithstanding any other provision of this Section 1.6, if the managing underwriter advises the Company in writing that marketing factors require a limitation of the number of shares to be underwritten, then the Company shall so advise all Holders of Registrable Securities and the number of shares of Registrable Securities that may be included in the registration and underwriting shall be allocated among all Holders thereof in proportion, as nearly as practicable, to the respective number of Registrable Securities held by such Holders at the time of filing the registration statement; provided, however, that, no Registrable Securities shall be excluded until all Worthington Shares, all Other Shares and all other Securities that are not Registrable Securities (other than Securities to be sold for the account of the Company) are first excluded, and provided further, that, except in the case of the Company's Initial Public Offering (where Registrable Securities may be excluded entirely), the number of Registrable Securities included in such underwriting shall not be reduced below 25% of the total number of shares in the underwriting. No Registrable Securities excluded from the underwriting by reason of the underwriter's marketing limitation shall be included in such registration. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares. The Company may include shares of Common Stock held by stockholders other than Holders in a registration statement pursuant to this Section 1.6 to the extent that the amount of Registrable Securities otherwise includible in such registration statement would not thereby be diminished.

If any Holder or other holder disapproves of the terms of any such underwriting, he or she may elect to withdraw therefrom by written notice to the Company and the managing underwriter. The Registrable Securities so withdrawn shall also be withdrawn from such registration and, in the case of the Company's Initial Public Offering, shall be subject to Section 1.14.

(c) Right to Terminate Registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 1.6 prior to the effectiveness of such registration, whether or not any Holder has elected to include securities in such registration.

1.7 Registration on Form S-3.

(a) If any Holder or Holders request that the Company file a registration statement on Form S-3 (or any successor form to Form S-3) for a public offering of Registrable Securities, the reasonably anticipated aggregate price to the public of which, net of underwriting discounts and commissions, would exceed $2,000,000, and the Company is then entitled to use Form S-3 under applicable Commission rules to register the Registrable Securities for such an offering, the Company will:

(i) promptly give written notice of the proposed registration to all other Holders; and

(ii) use its best efforts to effect as soon as practicable such registration (including, without limitation, the execution of an undertaking to file post-effective amendments, appropriate qualification under applicable blue sky or other state securities laws and appropriate compliance with applicable regulations issued under the Securities Act and any other governmental requirements or regulations) as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any Holder or Holders joining in such request as are specified in a written request received by the Company within 15 days after receipt of the written notice from the Company; provided, however, that the Company shall not be obligated to take any action to effect any such registration pursuant to this Section 1.7:

(1) if the Company, within ten (10) days of the receipt of the request for registration pursuant to this Section 1.7, gives notice of its bona fide intention to effect the filing of a registration statement with the Commission within ninety (90) days of receipt of such request (other than with respect to a registration statement relating to a Rule 145 transaction or an employee benefit plan or any other registration which is not appropriate for the registration of Registrable Securities);

(2) during the period starting with the date sixty (60) days prior to the Company's estimated date of filing of, and ending on the date three months immediately following, the effective date of any registration statement pertaining to Securities of the Company (other than with respect to a registration statement relating to an employee benefit plan), provided that the Company is actively employing in good faith all reasonable efforts to cause such registration statement to be filed and become effective; or

(3) if the Company shall furnish to such Holder or Holders a certificate signed by the President of the Company stating that in the good faith judgment of the Board of Directors it would be seriously detrimental to the Company or its stockholders for registration statements to be filed in the near future, then the Company's obligation to use its best efforts to file a registration statement shall be deferred for a period not to exceed 90 days from the receipt of the request to file such registration by such Holder or Holders; provided further, however,

that the Company may not utilize the rights provided for in subsections (1) and (2) above and this subsection (3) more than once in total in any twelve month period. For the avoidance of doubt, if the Company utilizes any of the rights provided for in subsections (1), (2) and (3), it shall not have the right to utilize the same right again; nor shall it have the right to utilize any of the other rights provided in subsections (1), (2) and (3) for twelve months.

(b) Underwriting. If the Holders requesting registration intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as part of their request made under Section 1.7(a), and the Company shall so advise the Holders as part of the notice given pursuant to Section 1.7(a)(i). The substantive provisions of Section 1.5(b) shall otherwise apply to such registration.

1.8 Expenses of Registration. All Registration Expenses incurred in connection with any registration pursuant to Sections 1.5, 1.6 and 1.7 shall be borne by the Company. If a registration proceeding is begun upon the request of Holders pursuant to Section 1.5 or 1.7, but such request is subsequently withdrawn at the request of the Holders, then the Holders of Registrable Securities to have been registered may either: (i) bear all Registration Expenses of such proceeding, pro rata on the basis of the number of shares to have been registered, in which case the Company shall be deemed not to have effected a registration pursuant to Section 1.5(a) or 1.7(a) of this Agreement as applicable; provided, however, that the Company, and not the Holders, shall be required to pay for the Registration Expenses if the Holders learn of a materially adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request promptly following discovery of such material adverse change; or (ii) if the registration is being effected pursuant to Section 1.5, require the Company to bear all Registration Expenses of such proceeding, in which case the Company shall be deemed to have effected a registration pursuant to Section 1.5(a). Unless otherwise stated, all other Selling Expenses relating to securities registered on behalf of the Holders shall be borne by the Holders of the registered securities included in such registration pro rata on the basis of the number of shares so registered, provided that to the extent a Holder elects to retain its own counsel (an "**Additional Counsel**") separate from the counsel for all the Holders permitted pursuant to the definition of "Registration Expenses" under Section 1.1, then such Holder shall exclusively bear the costs of such Additional Counsel.

1.9 Registration Procedures. In the case of each registration, qualification or compliance effected by the Company pursuant to this Section 1, the Company will keep each Holder advised in writing as to the initiation of each registration, qualification and compliance and as to the completion thereof. At its expense the Company will, as expeditiously as reasonably possible:

(a) Prepare and file with the Commission a registration statement with respect to such Registrable Securities and use its best efforts to cause such registration statement to become effective, and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or until the distribution described in the registration statement has been completed; provided, however, that such 120-day period shall be extended for a period of time equal to the period the Holder refrains from selling any securities included in such registration at the request of an underwriter of Common Stock (or other securities) of the Company.

(b) Prepare and file with the Commission, in consultation with the Holders, such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such registration statement.

(c) Furnish to the Holders participating in such registration and to the underwriters of the securities being registered such reasonable number of copies of the registration statement, preliminary prospectus, final prospectus and such other documents as such underwriters may reasonably request in order to facilitate the public offering of such securities.

(d) Use its best efforts to register and qualify the securities covered by such registration statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably requested by the Holders; provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act.

(e) In the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering. Each Holder participating in such underwriting shall also enter into and perform its obligations under such an agreement.

(f) Notify each Holder of Registrable Securities covered by such registration statement at any time when a prospectus relating thereto is required to be delivered under the Securities Act of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading or incomplete in light of the circumstances then existing, and at the request of any such Holder, prepare and furnish to such Holder a reasonable number of copies of a supplement to or an amendment of such prospectus as may be necessary so that, as thereafter delivered to the purchasers of such shares, such prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading or incomplete in the light of the circumstances then existing.

(g) Cause all such Registrable Securities registered pursuant hereunder to be listed on each securities exchange, or quoted in a U.S. automated inter-dealer quotation system, as the case may be, on which similar securities issued by the Company are then listed or quoted.

(h) Provide a transfer agent and registrar for all Registrable Securities registered pursuant hereunder and a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration.

(i) In the event of any underwritten public offering, cooperate with the selling Holders, the underwriters participating in the offering and their counsel in any due diligence investigation reasonably requested by the selling Holders or the underwriters in connection therewith, and participate, to the extent reasonably requested by the managing underwriter for the

offering or the selling Holder, in efforts to sell the Registrable Securities under the offering (including, without limitation, participating in "roadshow" meetings with prospective investors) that would be customary for underwritten primary offerings of a comparable amount of equity securities by the Company.

1.10 Indemnification.

(a) The Company will indemnify and defend each Holder, each of its officers and directors and partners, and each person controlling such Holder within the meaning of Section 15 of the Securities Act, with respect to which registration, qualification or compliance is being effected pursuant to this Section 1, and each underwriter, if any, and each person who controls any underwriter within the meaning of Section 15 of the Securities Act, against all expenses, claims, losses, damages or liabilities (or actions in respect thereof), including any of the foregoing incurred in settlement of any litigation, commenced or threatened, arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any registration statement, prospectus, preliminary prospectus, offering circular or other document, or any amendment or supplement thereto, incident to any such registration, qualification or compliance, or based on any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, or any violation or any alleged violation by the Company of the Securities Act or the Exchange Act or any state securities law, or any rule or regulation promulgated thereunder, applicable to the Company in connection with any such registration, qualification or compliance, and the Company will reimburse each such Holder, each of its officers and directors, and each person controlling such Holder, each such underwriter and each person who controls any such underwriter, for any legal and any other expenses reasonably incurred in connection with investigating, preparing or defending any such claim, loss, damage, liability or action, as such expenses are incurred, provided that the Company will not be liable in any such case to the extent that any such claim, loss, damage, liability or expense arises out of or is based on any untrue statement or omission or alleged untrue statement or omission, made in reliance upon and in conformity with written information furnished to the Company by an instrument duly executed by such Holder, controlling person or underwriter and stated to be specifically for use therein.

(b) Each Holder will, if Registrable Securities held by such Holder are included in the securities as to which such registration, qualification or compliance is being effected, indemnify the Company, each of its directors and officers, each underwriter, if any, of the Company's securities covered by such a registration statement, each person who controls the Company or such underwriter within the meaning of Section 15 of the Securities Act, and each other such Holder, each of its officers and directors and each person controlling such Holder within the meaning of Section 15 of the Securities Act, against all claims, losses, damages and liabilities (or actions in respect thereof) arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any such registration statement, prospectus, offering circular or other document, or any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse the Company, such Holders, such directors, officers, persons, underwriters or control persons for any legal or any other expenses reasonably incurred in connection with investigating or defending any such claim, loss, damage, liability or action, as such expenses are incurred, in each

case to the extent, but only if and to the extent, that such untrue statement (or alleged untrue statement) or omission (or alleged omission) is made in such registration statement, prospectus, offering circular or other document in reliance upon and in conformity with written information furnished to the Company by an instrument duly executed by such Holder and stated to be specifically for use therein; provided, however, that the liability of any Holder shall be limited to the net proceeds received by such Holder from the sale of Securities pursuant to such registration.

(c) Each party entitled to indemnification under this Section 1.10 (the "**Indemnified Party**") shall give notice to the party required to provide indemnification (the "**Indemnifying Party**") promptly after such Indemnified Party has actual knowledge of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume the defense of any such claim or any litigation resulting therefrom, provided that counsel for the Indemnifying Party, who shall conduct the defense of such claim or litigation, shall be approved by the Indemnified Party (whose approval shall not unreasonably be withheld), and the Indemnified Party may participate in such defense at such party's expense; provided, however, that an Indemnified Party (together with all other Indemnified Parties which may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the Indemnifying Party, if representation of such Indemnified Party by the counsel retained by the Indemnifying Party would be inappropriate due to actual or potential differing interests between such Indemnified Party and any other party represented by such counsel in such proceeding. The failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations under this Section 1 unless, and only to the extent that, the failure to give such notice is materially prejudicial to an Indemnifying Party's ability to defend such action. No Indemnifying Party, in the defense of any such claim or litigation, shall, except with the consent of each Indemnified Party, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect to such claim or litigation.

(d) If the indemnification provided for in this Section 1.10 is held by a court of competent jurisdiction to be unavailable to an Indemnified Party with respect to any loss, liability, claim, damage, or expense referred to therein, then the Indemnifying Party, in lieu of indemnifying such Indemnified Party hereunder, shall contribute to the amount paid or payable by such Indemnified Party as a result of such loss, liability, claim, damage, or expense in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party on the one hand and of the Indemnified Party on the other in connection with the statements or omissions that resulted in such loss, liability, claim, damage, or expense as well as any other relevant equitable considerations (except to the extent that contribution is not permitted under Section 11(f) of the Securities Act); provided, however, that, no Holder will be required to pay any amount under this subsection 1.10(d) in excess of the net proceeds from the sale of all Registrable Securities offered and sold by such Holder pursuant to such registration statement. The relative fault of the Indemnifying Party and of the Indemnified Party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the Indemnifying Party or by the Indemnified Party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control with respect to the rights and obligations of each of the parties to such underwriting agreement.

(f) The obligations of the Company and Holders under this Section 1.10 shall survive the completion of any offering of Registrable Securities in a registration statement under this Section 1, and otherwise.

1.11 Information by Holder. The Holder or Holders of Registrable Securities included in any registration shall furnish to the Company such information regarding such Holder or Holders, the Securities held by them and the distribution proposed by such Holder or Holders as the Company may reasonably request in writing and as shall be required in connection with any registration referred to in this Section 1.

1.12 Reports Under Securities Exchange Act of 1934. With a view to making available to the Holders the benefits of Rule 144 promulgated under the Securities Act and any other rule or regulation of the Commission that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company agrees to use its best efforts to:

(a) make and keep public information available, as those terms are understood and defined in Rule 144 under the Securities Act, at all times after the effective date that the Company becomes subject to the reporting requirements of the Securities Act or the Exchange Act;

(b) file with the Commission in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements);

(c) register its Common Stock under Section 12 of the Exchange Act at such time as it is required to do so pursuant to the Exchange Act; and

(d) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) a written statement by the Company as to its compliance with the reporting requirements of Rule 144 (at any time after ninety (90) days after the effective date of the first registration statement filed by the Company), the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after it so qualifies), (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information in the possession of or reasonably obtainable by the Company as may be reasonably requested in availing any Holder of any rule or regulation of the Commission which permits the selling of any such securities without registration or pursuant to such form.

1.13 Transfer of Registration Rights. The rights to cause the Company to register Registrable Securities granted to the Investors under Sections 1.5, 1.6 and 1.7 may be assigned to a transferee or assignee in connection with any transfer or assignment of Eligible Securities by an Investor; provided that (a) such transfer may otherwise be effected in accordance with applicable securities laws, (b) notice of such assignment is given to the Company, (c) such transferee is a Permitted Transferee and (d) such transferee or assignee agrees to be bound by and subject to the terms and conditions of this Agreement.

1.14 Standoff Agreement.

(a) Each Holder agrees in connection with the first sale of the Company's Common Stock in a firm commitment underwritten public offering pursuant to an effective registration statement under the Securities Act, upon notice by the Company or the underwriters managing such public offering, not to sell, make any short sale of, loan, pledge (or otherwise encumber or hypothecate), grant any option for the purchase of, or otherwise directly or indirectly dispose of any Securities (other than those included in the registration) without the prior written consent of the Company and such managing underwriters for such period of time as the Board of Directors establishes pursuant to its good faith negotiations with such managing underwriters; provided, however that:

(i) such agreement shall not exceed one hundred and eighty (180) days (or such greater period, not to exceed 17 days, as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto);

(ii) such agreement shall not apply to transfers to an Affiliate, provided that such Affiliate agrees to be bound by the terms of such agreement, to the same extent as if such transferee were the original party thereunder;

(iii) such agreement shall not apply to securities of the Company purchased by AllianceBernstein Venture Fund I, L.P., SmallCap World Fund, Inc., Cross Creek Capital, L.P., Cross Creek Capital Employees' Fund, L.P. or Wasatch Small Cap Growth or their respective Affiliates in the Initial Public Offering or in the public market for the Company's securities following the Initial Public Offering;

(iv) a Holder shall not be subject to such agreement unless (A) all executive officers and directors of the Company, (B), all stockholders of the Company holding more than 1% of the Company's outstanding capital stock; and (C) all other Holders and holders of other registration rights, are subject to or obligated to enter into similar agreements; and

(v) if and when any person identified in clause (iv) is released, in whole or in part, from such agreement (whether or not such release is contemplated at the time of the offering) or if any such agreement is terminated, the Holder shall be concurrently released on a pro rata basis based on the number of shares held by such person and the Holder.

(b) Each Holder agrees that prior to the Initial Public Offering it will not transfer securities of the Company unless each transferee agrees in writing to be bound by all of the provisions of this Section 1.14; provided that this Section 1.14(b) shall not apply to transfers pursuant to a registration statement.

(c) Each Holder hereby consents to the placement of stop transfer orders with the Company's transfer agent in order to enforce the foregoing provision and agrees to execute a market standoff agreement with said underwriters in customary form consistent with the provisions of this Section 1.14.

1.15 Termination of Rights. No Holder shall be entitled to exercise any right provided for in this Section 1 after the earlier of (i) five (5) years following the consummation of the Initial Public Offering, and (ii) that date following the Initial Public Offering upon which each Holder holds less than 1% of the then issued and outstanding shares of capital stock of the Company and all such shares may be sold under Section 5 of the Securities Act whether pursuant to Rule 144 or another applicable exemption during any 90 day period. All other provisions hereof relating to registration rights shall continue to be effective despite any termination of such registration rights pursuant to this section.

1.16 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not enter into any agreement granting any holder or prospective holder of any securities of the Company registration rights with respect to such securities unless (i) such new registration rights, are subordinate to the registration rights granted Holders hereunder and include similar market stand-off obligations or (ii) such new registration rights are approved by the Holders of 50% of the Registrable Securities then held by Holders (assuming exercise or conversion of all outstanding Eligible Securities); provided, however, that Warrantholders may enter into this Agreement by executing and delivering a counterpart signature page to this Agreement.

SECTION 2

Affirmative Covenants of the Company

The Company hereby covenants and agrees as follows:

2.1 Delivery of Financial Statements. The Company will furnish to each Investor who holds at least 40,000 shares of Eligible Securities (as adjusted for stock splits and combinations):

(a) as soon as reasonably practicable, an income statement for such fiscal year, a balance sheet of the Company and statement of stockholder's equity as of the end of such year, and a cash flow statement for such year, such year-end financial reports to be in reasonable detail, prepared in accordance with generally accepted accounting principles ("**GAAP**"), and audited and certified by independent public accountants of nationally recognized standing selected by the Company; and

(b) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, an unaudited

income statement, cash flow statement for such fiscal quarter and an unaudited balance sheet as of the end of such fiscal quarter.

2.2 Additional Information Rights.

(a) Budget and Operating Plan. The Company will furnish to each Investor who holds at least 750,000 shares of Eligible Securities (as adjusted for stock splits and combinations) as soon as practicable upon approval or adoption by the Company's Board of Directors, and in any event within 15 days prior to the start of a fiscal year, the Company's budget and operating plan for such fiscal year.

(b) Other Information. The Company will furnish to each Investor who holds at least 750,000 shares of Eligible Securities (as adjusted for stock splits and combinations) such other information relating to the financial condition, business, prospects or corporate affairs of the Company as such Investor may from time to time request; provided, however, that the Company shall not be obligated under this subsection (b) or any other subsection of Section 2.2 to provide information which it deems in good faith to be a trade secret or similar confidential information.

(c) Inspection. The Company shall permit each Investor who holds at least 750,000 shares of Eligible Securities (as adjusted for stock splits and combinations), at such Investor's expense, to visit and inspect the Company's properties, to examine its books of account and records and to discuss the Company's affairs, finances and accounts with its officers, all at such reasonable times and during normal working hours as may be requested by such Investor; provided, however, that the Company shall not be obligated under this subsection (c) or any other subsection of Section 2.2 to provide access to information which it deems in good faith to be a trade secret or similar confidential information.

(d) Monthly Financial Statements. The Company will furnish to each Investor who holds at least 750,000 shares of Eligible Securities (as adjusted for stock splits and combinations), upon the request of such Investors, within thirty (30) days of the end of each month, an unaudited income statement and cash flow statement and unaudited balance sheet for and as of the end of such month, in reasonable detail.

2.3 Confidentiality. Each Investor agrees to use commercially reasonable efforts to maintain the confidentiality of information obtained pursuant to this Section 2, provided that such obligation shall not apply to (i) information previously in possession or independently developed by Investor, (ii) information publicly available other than as a result of breach of this provision (iii) information required to be disclosed by statute, regulation or court or administrative order. Notwithstanding anything to the contrary set forth in this Agreement, in any other agreement to which the Company and an Investor are party or in any statute (to the extent permitted by applicable law), the Company may withhold any information or material from an Investor if the Company's management or the Board of Directors reasonably determine that (a) the information or material is commercially or competitively sensitive for the Company, (b) such Investor is a competitor or potential competitor of the Company, and (c) disclosure of such information or material to such Investor would be harmful or potentially harmful to the interests of the Company.

2.4 Visitation Rights. One representative chosen collectively by LB I Group Inc., Lehman Brothers P.A. LLC, Lehman Brothers Partnership Account 2000/2001, L.P. and Lehman Brothers Offshore Partnership Account 2000/2001, L.P. (collectively, "**Lehman**"), one representative chosen collectively by EuclidSR Partners, L.P. and EuclidSR Biotechnology Partners, L.P. (collectively, "**EuclidSR**"), one representative chosen by Piper Jaffray Healthcare Fund III, L.P. ("**Piper Jaffray**"), one representative chosen by GE Capital Equity Investments, Inc. ("**GE Capital**"), one representative chosen collectively by Interwest Investors VII, L. P. and Interwest Partners VII, L.P. (collectively, "**Interwest**"), one representative chosen by AllianceBernstein Venture Fund I, L.P. ("**Alliance**"), one representative chosen collectively by Cross Creek Capital, L.P., Cross Creek Capital Employees' Fund, L.P. and Wasatch Small Cap Growth (collectively, "**Wasatch**"), one representative chosen by BMSIF, and one representative chosen collectively by the holders of a majority of the Shares purchased under that certain Amendment No. 2 to the Series E Preferred Stock Purchase Agreement effective as of October 10, 2007 (collectively, the "**October 2007 Representative**") shall have the right to attend all meetings of the Board of Directors, including meetings of any committee of the Board and including the right to participate in any telephonic board meetings, so long as such Investor or the October 2007 Representative holds at least 750,000 shares of Eligible Securities (as adjusted for stock splits and combinations and the like). Said representative(s) shall be provided with notice of the meetings in the same manner at the same time as the members of the Board of Directors and shall be provided with any materials distributed to the Board of Directors in connection with board meetings. The foregoing visitation rights may be limited by the Board of Directors if (i), upon the advice of counsel, the Board of Directors determines that exclusion is required by third party confidentiality agreements, (ii) the Board is discussing engaging Investor or an affiliate of Investor as a financial advisor or underwriter; or (iii) the Board is discussing a material transaction with an entity in which Investor or a private equity fund affiliated with Investor is a 5% or greater stockholder, or (iv) the Board determines in good faith upon advice of counsel that limitations are required to maintain attorney-client privilege.

2.5 Stock Option Vesting. Unless otherwise decided by the Board of Directors, all option grants to employees shall vest over a four-year period with 25% of the shares subject to each option vesting a year after commencement of employment and the remainder of the shares vesting in equal amounts on a monthly basis thereafter.

2.6 Insurance. The Company shall, subject to the approval of the Board of Directors, maintain such fire, casualty and general liability insurance with coverages and in amounts as shall be determined by the Board of Directors. The Company agrees to maintain in full force and effect directors and officers liability insurance with coverage in the aggregate amount of amount of $2 million covering all of its directors. The Company will maintain coverage for the Series C Directors (as defined in the Voting Agreement) and the Series D Directors (as defined in the Voting Agreement) under such directors and officers liability insurance at all times commencing upon the Closing (as defined in the Series D Preferred Stock Purchase Agreement dated August 16, 2005).

2.7 Proprietary Information Agreements. Unless otherwise determined by the Board of Directors, all future employees and consultants of the Company shall be required to execute and deliver a proprietary information and invention assignment agreement.

2.8 Invention Assignments. The Company agrees to use commercially reasonable efforts to obtain from each of the individual contributing inventors for each invention that forms any part of any patent or patent application owned by or licensed to the Company, executed invention assignments in favor of the Company or the appropriate third party licensor, as the case may be.

2.9 Key-Man Life Insurance. The Company shall obtain and maintain key-man life insurance in such amount as is determined by the Company's Board of Directors, on Gajus Worthington. Such policy shall name the Company as loss payee and shall not be cancelable by the Company without prior unanimous approval of the Board of Directors.

2.10 Compliance with Laws. The Company shall use its best efforts to comply with the requirements of all applicable laws, rules, regulations and orders of any governmental authority, where noncompliance would have a material adverse effect on the Company's business and financial condition.

2.11 Termination of Covenants. The covenants set forth in Section 2 shall terminate on, and be of no further force or effect after, the closing of the Company's Initial Public Offering. The rights granted pursuant to this Section 2 are not transferable other than to Affiliates of Holders.

SECTION 3

Right of First Offer For Company Securities

3.1 Right of First Offer. Subject to the terms and conditions specified in this Section 3, the Company hereby grants to each Investor a right of first offer with respect to future sales by the Company of its Securities. An Investor shall be entitled to apportion the right of first offer hereby granted among itself and its partners and Affiliates in such proportions as it deems appropriate.

Each time the Company proposes to offer any Securities in a Financing (as defined below), the Company shall first make an offering of such Securities to each Investor in accordance with the following provisions:

(a) The Company shall deliver a notice ("**Notice**") to each Investor stating (i) its intention to offer such Securities for sale, (ii) the number of such Securities to be offered (the "**Offered Securities**"), (iii) the price, if any, for which it proposes to offer such Securities, (iv) the terms of such offer and (v) the Offer Amount (as defined below).

(b) Within fifteen (15) calendar days after receipt of the Notice, each Investor may elect to purchase, at the price and on the terms specified in the Notice, such Securities in an amount up to the Offer Amount by providing the Company with written notice of its election.

(c) An election by an Investor pursuant to Section 3.1(b) to purchase Offered Securities shall not be considered a binding commitment on the Investor unless and until the Company receives binding commitments to purchase on the terms and conditions contained in the Notice substantially all of the Offered Securities which the Investors have not elected to purchase.

Notwithstanding the foregoing, the Company and each of the Investors acknowledge and agree that Lighthouse shall have the opportunity to invest not less than $250,000 in connection with the first Financing completed after the date of this Agreement that involves the sale and issuance by the Company of shares of the Company's convertible preferred stock with aggregate gross proceeds to the Company of at least $3 million. In the event that Lighthouse's right to purchase Offered Securities as otherwise set forth in this Section 3.1 would not permit such $250,000 investment, then each of the Investors agrees that its respective right to purchase Offered Securities pursuant to this Section 3.1 may be cut-back (proportionately with all other Investors based on the number of shares of Eligible Securities held by the Investors) in such amounts as may be necessary to permit the exercise of Lighthouse's rights as set forth herein.

3.2 Sale of Securities by Company. Within 60 days of the expiration of the period described in Section 3.1(b), any Offered Securities which the Investors have not elected to purchase may be sold by the Company to any person or persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Notice. If the Company does not complete the sale of all such Offered Securities within said 60-day period, the rights of the Investors with respect to any such unsold Offered Securities shall be deemed to be revived.

3.3 Offer Amount. The "**Offer Amount**" shall equal that percentage of the Offered Securities equal to the number of shares of Eligible Securities held by an Investor which are Registrable Securities divided by the total number of outstanding shares of Common Stock of the Company. For the purposes of the foregoing calculations, all outstanding options and warrants shall be deemed to be exercised and all Preferred Stock shall be deemed to have been converted into Common Stock at the prevailing conversion rate.

3.4 Financing. "**Financing**" shall mean an offering or series of related offerings of Securities by the Company for purposes of raising working capital in a minimum amount of $250,000. Financing shall not include (i) the issuance or sale of shares of Common Stock or options to purchase Common stock to employees, officers, directors or consultants for the primary purpose of soliciting or retaining their services in such amount as shall have been approved by the Board of Directors, (ii) the issuance or sale of Securities to leasing entities or financial institutions in connection with commercial leasing or borrowing transactions approved by the Board of Directors, (iii) the issuance or sale of Securities to third party providers of goods or services in connection with

transactions approved by the Board of Directors; (iv) the sale of Securities in a registered public offering, (v) any issuances of Securities in connection with any stock split, stock dividend or recapitalization by the Company, (vi) the issuance of Securities at a price (on an as converted to Common Stock basis) below the original issue price of the Company's Series E Preferred Stock (as adjusted for stock splits, recapitalizations and like events) in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or any joint venture or strategic alliance, if such issuance is approved unanimously by the Board of Directors, (vii) the issuance of Securities at a price (on an as converted to Common Stock basis) at or above the original issue price of the Company's Series E Preferred Stock (as adjusted for stock splits, recapitalizations and like events) in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or any joint venture or strategic alliance, if such issuance is approved by the Board of Directors, (viii) the issuance of Securities at a price (on an as converted to Common Stock basis) below the original issue price of the Company's Series E Preferred Stock (as adjusted for stock splits, recapitalizations and like events) in connection with the acquisition of another corporation by the Company by merger, consolidation, or purchase of all or substantially all of the assets or shares of such corporation unanimously approved by the Board of Directors, (ix) the issuance of Securities at a price (on an as converted to Common Stock basis) at or above the original issue price of the Company's Series E Preferred Stock (as adjusted for stock splits, recapitalizations and like events) in connection with the acquisition of another corporation by the Company by merger, consolidation, or purchase of all or substantially all of the assets or shares of such corporation approved by the Board of Directors; (x) shares of Series E Preferred Stock issued pursuant to the terms of the Prior Purchase Agreement or the 2009 Purchase Agreement; and (xi) interest-bearing convertible promissory notes in the aggregate principal amount of $8 million issued or issuable pursuant to the CNPA and/or the CNA and any Securities issued on conversion thereof.

3.5 Termination of Right of First Offer. The right of first offer contained in this Section shall not apply to and shall terminate upon the closing of an Initial Public Offering. The right of first offer granted under this Section 3 is transferable to transferees of at least 750,000 shares of Registrable Securities (as adjusted for stock splits, combinations and the like) or to Affiliates.

SECTION 4

Right of First Offer with Respect to Founder Shares

4.1 Notice of Sales. Should a Founder (a "**Seller**") propose to accept one or more bona fide offers (collectively, the "**Purchase Offer**") from any persons ("**Purchasers**") to purchase Founders Shares from such Seller (other than as set forth 4.2(d) hereof), then such Seller shall, promptly after exercise or termination of any rights of first refusal held by the Company, deliver a notice (the "**Notice**") to the Company and all Investors holding more than 750,000 shares of Eligible Securities ("**Eligible Investors**").

4.2 Purchase Right. Each Eligible Investor shall have the right, exercisable upon written notice to such Seller within ten (10) business days after receipt of the Notice, to purchase Founders Shares on the terms and conditions specified in the Purchase Offer. To the extent an Eligible Investor exercises its right to purchase such shares in accordance with the terms and conditions set forth below, the number of shares of stock which such Seller may sell to the

Purchasers pursuant to the Purchase Offer shall be correspondingly reduced. The purchase right of each Eligible Investor shall be subject to the following terms and conditions:

(a) Calculation of Shares. Each Eligible Investor may purchase all or any part of that number of Founder Shares equal to the number obtained by multiplying (i) the aggregate number of Founders Shares covered by the Purchase Offer by (ii) a fraction, the numerator of which is the number of shares of Common Stock of the Company at the time owned by such Eligible Investor and the denominator of which is the number of shares of Common Stock of the Company then outstanding. For the purposes of the foregoing calculations, all outstanding options and warrants shall be deemed to be exercised and all Preferred Stock shall be deemed to have been converted into Common Stock at the prevailing conversion rate.

(b) Delivery of Consideration. Each Eligible Investor may effect its purchase right by promptly delivering to such Seller a written notice and a check or wire transfer equal to the purchase price specified in the Purchase Offer for the number of shares the Eligible Investor desires to purchase pursuant to this Section 4.2.

(c) Certificate. Within ten (10) business days of receipt of Eligible Investor's funds pursuant to Section 4.2(c), Seller shall deliver to such Eligible Investor a certificate or certificates representing the shares of Founder Shares purchased by such Eligible Investor.

(d) Permitted Transactions. The participation rights in this Section 4 shall not pertain or apply to:

(i) Any transfer to a revocable grantor trust with respect to which the Founder and members of his family are the sole beneficiaries;

(ii) Any repurchase of Founders Shares by the Company;

(iii) Any exercise by the Company of a right or remedy under the terms of any loan, security or stock pledge agreement where the Founders Shares serve as security for a loan made by the Company;

(iv) Any transfer to any ancestors or descendants or spouse of a Founder or to a trustee for their benefit or to a custodian for the benefit of a Founders' issue; or

(v) Any bona fide gift;

provided, however, that such Founder shall inform the Eligible Investors of such transfer or gift (other than a transfer pursuant to clause (ii) or (iii)) prior to effecting it and the transferee or donee (if other than the Company) shall furnish the Company and the Eligible Investors with a written agreement to be bound by and comply with all applicable provisions of this Agreement.

4.3 Sale of Securities by Founder. Within 60 days of the expiration of the period described in the first paragraph of Section 4.2, any Founders Shares covered by the Purchase Offer which the Eligible Investors have not elected to purchase may be sold by the Seller to the Purchasers on the terms and conditions of the Purchase Offer. If the Seller does not complete the sale of all

Founders Shares covered by the Purchase Offer within such period, the rights of the Eligible Investors with respect to any such unsold Founders Shares shall be deemed to be revived.

4.4 Termination and Transfer. The restrictions imposed and rights granted by this Section 4 shall not apply to and shall terminate immediately prior to the closing of the Company's Initial Public Offering. Securities received pursuant to any stock dividend, stock split, recapitalization, or exercise of a conversion right shall be subject to this Section 4 to the same extent as the shares of the Company with respect to which they were issued. The right of first offer granted under this Section 4 is transferable to transferees of at least 750,000 shares of Registrable Securities (as adjusted for stock splits, combinations and the like) or to Affiliates.

4.5 Prohibited Transfer. Any attempt by a Founder to transfer Founders Shares in violation of Section 4 hereof shall be void and the Company agrees it will not effect such a transfer nor will it treat any alleged transferee(s) as the holder of such shares, without the written consent of two-thirds (2/3) in interest of the Eligible Investors.

SECTION 5

Right of Co-Sale

5.1 Notice of Sales. Should a Founder (a "**Seller**") propose to accept one or more bona fide offers (collectively, the "**Purchase Offer**") from any persons ("**Purchasers**") to purchase Founders Shares from such Seller (other than as set forth 5.2(d)), then such Seller shall, promptly after exercise or termination of any rights of first refusal held by the Company or the Eligible Investors, deliver a notice (the "**Notice**") to the Company and all Eligible Investors describing the terms and conditions of the Purchase Offer.

5.2 Participation Right. Each Eligible Investor shall have the right, exercisable upon written notice to such Seller within fifteen (15) business days after receipt of the Notice, to participate in such Seller's sale of stock pursuant to the specified terms and conditions of such Purchase Offer. To the extent an Eligible Investor exercises such right of participation in accordance with the terms and conditions set forth below, the number of shares of stock which such Seller may sell pursuant to such Purchase Offer shall be correspondingly reduced. The right of participation of each Eligible Investor shall be subject to the following terms and conditions:

(a) Calculation of Shares. Each Eligible Investor may sell all or any part of that number of shares of Common Stock of the Company equal to the number obtained by multiplying (i) the aggregate number of Founders Shares covered by the Purchase Offer by (ii) a fraction, the numerator of which is the number of shares of Common Stock of the Company at the time owned by such Eligible Investor and the denominator of which is the number of shares of Common Stock of the Company then outstanding. For the purposes of the foregoing calculations, all outstanding options and warrants shall be deemed to be exercised and all Preferred Stock shall be deemed to have been converted into Common Stock at the prevailing conversion rate.

(b) Delivery of Certificates. Each Eligible Investor may effect its participation in the sale by delivering to such Seller for transfer to the Purchaser(s) one or more

certificates, properly endorsed for transfer, which represent at least the number of shares of Common Stock which such Eligible Investor elects to sell pursuant to this Section 5.2.

(c) Transfer. The stock certificate or certificates which the Eligible Investor delivers to such Seller pursuant to Section 5.2 shall be delivered by the Seller to the Purchaser(s) in consummation of the sale of the Securities pursuant to the terms and conditions specified in the Notice, and such Seller shall promptly thereafter remit to such Eligible Investor that portion of the sale proceeds to which such Eligible Investor is entitled by reason of its participation in such sale.

(d) Permitted Transactions. The participation rights in this Section 5 shall not pertain or apply to:

(i) Any transfer to a revocable grantor trust with respect to which the Seller and members of his family are the sole beneficiaries;

(ii) Any repurchase of Founders Shares by the Company;

(iii) Any exercise by the Company of a right or remedy under the terms of any loan, security or stock pledge agreement where the Founders Shares serve as security for a loan made by the Company;

(iv) Any transfer to any ancestors or descendants or spouse of a Founder or to a trustee for their benefit or to a custodian for the benefit of a Founders' issue; or

(v) Any bona fide gift;

provided, however, that such Founder shall inform the Eligible Investors of such transfer or gift (other than a transfer pursuant to clause (ii) or (iii)) prior to effecting it and the transferee or donee (if other than the Company) shall furnish the Company and the Eligible Investors with a written agreement to be bound by and comply with all applicable provisions of this Agreement.

5.3 Sale of Securities by Founder. Within 45 days of the expiration of the period described in the first paragraph of Section 5.2, any Founders Shares covered by the Purchase Offer which the Eligible Investors have not elected to purchase may be sold by the Seller to the Purchasers on the terms and conditions of the Purchase Offer. If the Seller does not complete the sale of all Founders Shares covered by the Purchase Offer within such period, the rights of the Eligible Investors with respect to any such unsold Founders Shares shall be deemed to be revived.

5.4 Termination and Transfer. The restrictions imposed and rights granted by this Section 5 shall not apply to and shall terminate immediately prior to the closing of the Company's Initial Public Offering. Securities received pursuant to any stock dividend, stock split, recapitalization, or exercise of a conversion right shall be subject to this Section 5 to the same extent as the shares of the Company with respect to which they were issued. The co-sale right granted under this Section 5 is transferable to transferees of at least 750,000 shares of Registrable Securities (as adjusted for stock splits, combinations and the like) or to Affiliates.

5.5 Prohibited Transfers.

(a) In the event any Founder should sell any Founders Shares in contravention of the co-sale rights of the Investors under Section 5 (a "**Prohibited Transfer**"), the Investors, in addition to such other remedies as may be available at law, in equity or hereunder, shall have the put option provided below, and the Founder shall be bound by the applicable provisions of such option.

(b) In the event of a Prohibited Transfer, each Eligible Investor shall have the right to sell to the Founder the type and number of shares of Common Stock equal to the number of shares that such Eligible Investor would have been entitled to transfer to the third-party transferee(s) under Section 5.2 hereof had the Prohibited Transfer been effected pursuant to and in compliance with the terms thereof. Such sale shall be made on the following terms and conditions:

(i) The price per share at which the shares are to be sold to the Founder shall be equal to the price per share paid by the third-party transferee(s) to the Founder in the Prohibited Transfer. Such price per share shall be paid to the Eligible Investor in cash if the Founder received cash for his shares. If the Founder did not receive cash but received other property instead, the price per share to be paid to the Eligible Investor shall be paid (A) in the form of the property received by the Founder for his shares, or (B) in cash equal to the fair market value of the property received by such Founder as determined in good faith by the Company's Board of Directors, at the option of the Eligible Investor. The Founder shall also reimburse each Eligible Investor for any and all fees and expense, including legal fees and expenses, incurred pursuant to the exercise or the attempted exercise of the Eligible Investor's rights under Section 5.

(ii) Within thirty (30) days after the later of the dates on which the Eligible Investor (A) received notice of the Prohibited Transfer or (B) otherwise became aware of the Prohibited Transfer, each Eligible Investor shall, if exercising the option created hereby, deliver to the Founder the certificate or certificates representing shares to be sold, each certificate to be properly endorsed for transfer.

(iii) The Founder shall, upon receipt of the certificate or certificates for the shares to be sold by an Eligible Investor pursuant to this Section 5, pay the aggregate purchase price therefor and the amount of reimbursable fees and expenses, as specified in subparagraph 5.5(b)(i), in cash or by other means acceptable to the Eligible Investor.

(c) Notwithstanding the foregoing, any attempt by a Founder to transfer Founders Shares in violation of Section 5 hereof shall be void and the Company agrees it will not effect such a transfer nor will it treat any alleged transferee(s) as the holder of such shares, without the written consent of two-thirds (2/3) in interest of the Eligible Investors.

SECTION 6

Miscellaneous

6.1 Governing Law; Jurisdiction. This Agreement shall be construed in accordance with, and governed in all respects by, the laws of the State of California, as applied to agreements entered into, and to be performed entirely in such state, between residents of such state.

The parties hereto agree to submit to the jurisdiction of the federal and state courts of San Mateo County, California with respect to the breach or interpretation of this Agreement or the enforcement of any and all rights, duties, liabilities, obligations, powers, and other relations between the parties arising under this Agreement.

6.2 Successors and Assigns. Except as otherwise provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

6.3 Notices, Etc. All notices and other communications required or permitted hereunder, shall be in writing and shall be sent by facsimile personally delivered, mailed by registered or certified mail, postage prepaid, return receipt requested, or otherwise delivered by a nationally-recognized overnight courier, addressed (a) if to an Investor, at Investor's facsimile number or address as set forth in the records of the Company or (b) if to any other holder of any Eligible Securities, at such address as such holder shall have furnished the Company in writing, or, until any such holder so furnishes an address to the Company, then to and at the address of the last holder of such Eligible Securities who has so furnished an address or facsimile number to the Company, or (c) if to a Founder, at such Founder's facsimile number or address set forth on Exhibit B hereto, or a such other address as such Founder shall have furnished to the Company in writing, or (d) if to the Company, at its facsimile number or address set forth on the signature page hereto addressed to the attention of the Corporate Secretary, or at such other address as the Company shall have furnished to the Investors. Any such notice or communication shall be deemed to have been received (A) in the case of personal delivery, on the date of such delivery, (B) in the case of a nationally-recognized overnight courier, on the next business day after the date when sent, (C) in the case of mailing, on the third business day following that on which the piece of mail containing such communication is posted and (D) in the case of delivery via facsimile, one (1) business day after the date of transmission provided that said transmission is confirmed telephonically on the date of transmission.

6.4 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any holder of any Eligible Securities upon any breach or default of the Company under this Agreement shall impair any such right, power or remedy of such holder, nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any holder of any breach or default under this Agreement, or any waiver on the part of any holder of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing or as provided in this Agreement. All remedies, either under this Agreement or by law or otherwise afforded to any holder, shall be cumulative and not alternative.

6.5 Third Parties. Nothing in this Agreement, express or implied, is intended to confer upon any party, other than the parties hereto, and their respective successors and assigns, any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.6 Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, portions of such provisions, or such provisions in their entirety, to the extent necessary, shall be severed from this Agreement, and the balance of this Agreement shall be enforceable in accordance with its terms.

6.7 Amendment and Waiver. Any provision of this Agreement may be amended or waived with the written consent of the Company and the Holders of at least two-thirds of the outstanding shares of the Registrable Securities then held by Holders (assuming the exercise or conversion of all outstanding Eligible Securities); provided, however, (i) that in the event such amendment or waiver adversely affects the rights and/or obligations of the Founders under this Agreement in a different manner than the other Holders, such amendment or waiver shall also require written consent of the Founders holding a majority of the then outstanding Founders Shares, (ii) that in the event such amendment or waiver adversely affects the rights and/or obligations of Lehman, EuclidSR, Piper Jaffray, GE Capital, Interwest, Alliance, Wasatch, BMSIF or the October 2007 Representative under Section 2.4 of this Agreement, such amendment or waiver shall not be effective as to Lehman, EuclidSR, Piper Jaffray, GE Capital, Interwest, Alliance, Wasatch, BMSIF or the October 2007 Representative, as the case may be, without the written consent of such party, and (iii) that in the event such amendment or waiver adversely affects the rights and/or obligations of Warrantholders under this Agreement in a different manner than the other Holders, such amendment or waiver shall also require the written consent of Warrantholders holding a majority of the then outstanding Warrant Shares. Notwithstanding the foregoing, any purchaser of Series E Preferred Stock pursuant to the 2009 Purchase Agreement may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement and such purchaser shall be deemed a Holder and an Investor hereunder. The parties agree that Exhibit A shall be updated automatically without any formal amendment to reflect the addition of any such additional party. Any amendment or waiver effected in accordance with this paragraph shall be binding upon each Holder, the Founders, the holder of the Other Shares, Warrantholders and the Company. In addition, the Company may waive performance of any obligation owing to it, as to some or all of the Holders, or agree to accept alternatives to such performance, without obtaining the consent of any other Holder. In the event that an underwriting agreement is entered into between the Company and any Holder, and such underwriting agreement contains terms differing from this Agreement, as to any such Holder the terms of such underwriting agreement shall govern.

6.8 Rights of Holders. Each Holder shall have the absolute right to exercise or refrain from exercising any right or rights that such holder may have by reason of this Agreement, including, without limitation, the right to consent to the waiver or modification of any obligation under this Agreement, and such holder shall not incur any liability to any other holder of any Securities as a result of exercising or refraining from exercising any such right or rights.

6.9 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument.

6.10 Titles and Subtitles. The titles of the paragraphs and subparagraphs of this Agreement are for convenience of reference only and are not to be considered in construing this Agreement.

6.11 Amendment and Restatement of Prior Agreement. The undersigned Prior Investors who in the aggregate hold at least two-thirds of the outstanding Registrable Securities (as defined in the Prior Agreement) and the undersigned Founders hereby amend and restate the Prior Agreement pursuant to Section 6.7 thereof.

6.12 Waiver of Right of First Offer. The undersigned Prior Investors who in the aggregate hold at least two-thirds of the outstanding Registrable Securities (as defined in the Prior Agreement) hereby waive on behalf of all Prior Investors any rights of participation or notice under Section 3 of this Agreement and the Prior Agreement with respect to the securities sold pursuant to the 2009 Purchase Agreement. By its execution below, Lighthouse waives any right of participation or notice under Section 3 of this Agreement and Section 3 of the Prior Agreement with respect to securities sold under the 2009 Purchase Agreement.

6.13 Aggregation of Stock. All shares of Eligible Securities held or acquired by Affiliated entities or persons shall be aggregated together for the purpose of determining the availability of any rights under this Agreement.

6.14 Jury Trial

. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING (WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATED TO THIS AGREEMENT.

* * * * *

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

COMPANY:

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington
Gajus V. Worthington,
President and Chief Executive Officer

Address:

7000 Shoreline Court, Suite 100
South San Francisco, CA 94080

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

FOUNDERS:

/s/ Gajus V. Worthington
Gajus V. Worthington

/s/ Stephen R. Quake
Stephen R. Quake

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

ARTEMIS HEALTH, INC.
a Delaware Corporation

By: Phyllis Whiteley

Name: Phyllis Whiteley

Title: Chief Executive Officer

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

VERSANT AFFILIATES FUND 1-A, L.P.
VERSANT AFFILIATES FUND 1-B, L.P.
VERSANT SIDE FUND I, L.P.
VERSANT VENTURE CAPITAL I, L.P.

By: Versant Ventures I, LLC
its General Partner

By: /s/ Samuel D. Colella

Name: Samuel D. Colella

Title: Managing Director

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

EUCLIDSR PARTNERS, L.P.

By: EuclidSR Associates, L.P.,
its General Partner

By: /s/ Raymond J. Whitaker

Name: Raymond J. Whitaker

Title: General Partner

EUCLIDSR BIOTECHNOLOGY PARTNERS, L.P.

By: EuclidSR Biotechnology Associates, L.P.,
its General Partner

By: /s/ Raymond J. Whitaker

Name: Raymond J. Whitaker

Title: General Partner

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

BIOMEDICAL SCIENCES INVESTMENT FUND PTE LTD

By: /s/ Chu Swee Yeok

Name: Chu Swee Yeok

Title: Director

SINGAPORE BIO-INNOVATIONS PTE LTD

By: /s/ Ho Siu Gie

Name: Ho Siu Gie

Title: Director

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

WS INVESTMENT COMPANY, LLC (2009A)

By: /s/ James A. Terranova

Name: _____

Title: _____

WS INVESTMENT COMPANY, LLC (2009C)

By: /s/ James A. Terranova

Name: _____

Title: _____

WS INVESTMENT COMPANY, LLC (99B)

By: /s/ James A. Terranova

Name: _____

Title: _____

WS INVESTMENT COMPANY, LLC (2000B)

By: /s/ James A. Terranova

Name: _____

Title: _____

WS INVESTMENT COMPANY, LLC (2001D)

By: /s/ James A. Terranova

Name: _____

Title: _____

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

ALLOY VENTURES 2005, L.P.

By: Alloy Ventures 2005, LLC
its General Partner

By: /s/ Craig C. Taylor

Name: Craig C. Taylor

Title: Managing Member of Alloy Ventures 2005 LLC
Managing Member of Alloy Ventures 2005, L.P.

ALLOY VENTURES 2002, L.P.
ALLOY PARTNERS 2002, L.P.

By: Alloy Ventures 2002, LLC
its General Partner

By: /s/ Craig C. Taylor

Name: Craig C. Taylor

Title: Managing Member of Alloy Ventures 2002 LLC
Managing Member of Alloy Partners 2002, L.P.
and Alloy Ventures 2002, L.P.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Bruce Burrows

BRUCE BURROWS

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

ROBERT F. KORNEGAY, JR. REVOCABLE TRUST U/D/T DATED MAY 27, 2004, ROBERT F. KORNEGAY, JR., TRUSTEE

By: /s/ Robert F. Kornegay

Name: Robert F. Kornegay

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

ALLIANCEBERNSTEIN VENTURE FUND I, L.P.

By: AllianceBernstein ESG Venture Management, L.P.,its general partner

By: AllianceBernstein Global Derivatives Corporation, its general partner

By: /s/ Mona Bhalla

Name: Mona Bhalla

Title: Vice President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

SIGHTLINE HEALTHCARE FUND III, L.P.

By: /s/ Maureen Harder

Name: Maureen Harder

Title: Managing Director

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

CROSS CREEK CAPITAL, L.P.

By: Cross Creek Capital GP, L.P.,
its Sole General Partner

By: Cross Creek Capital, LLC,
its Sole General Partner

By: Wasatch Advisors, Inc.,
its Sole Member

By: Daniel Thurber

Name: /s/ Daniel Thurber

Title: Vice President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

CROSS CREEK CAPITAL EMPLOYEES' FUND, L.P.

By: Cross Creek Capital GP, L.P.,
its Sole General Partner

By: Cross Creek Capital, LLC,
its Sole General Partner

By: Wasatch Advisors, Inc.,
its Sole Member

By: /s/ Daniel Thurber

Name: Daniel Thurber

Title: Vice President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

WASATCH FUNDS, INC.
Wasatch Small Cap Growth Fund

By: Wasatch Advisors, Inc.,
its Investment Adviser

By: /s/ Daniel Thurber

Name: Daniel Thurber

Title: Vice President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

SMALLCAP WORLD FUND, INC.

By: Capital Research and Management Company, its investment adviser

By: /s/ Michael J. Downer

Name: Michael J. Downer

Title: Senior Vice President and Secretary

Approved for Signature by CRMC Legal Dept. L2e

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

FIDELITY CONTRAFUND:
FIDELITY ADVISOR NEW INSIGHTS FUND

By: /s/ Jeffrey Christian

Name: Jeffrey Christian

Title: Deputy Treasurer

FIDELITY CONTRAFUND: FIDELITY CONTRAFUND

By: /s/ Jeffrey Christian

Name: Jeffrey Christian

Title: Deputy Treasurer

VARIABLE INSURANCE PRODUCTS FUND II: CONTRAFUND PORTFOLIO

By: /s/ Jeffrey Christian

Name: Jeffrey Christian

Title: Deputy Treasurer

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

IN-Q-TEL, INC.

By: /s/ Matt Strottman

Name: Matt Strottman

Title: CFO

IN-Q-TEL EMPLOYEES FUND, LLC

By: /s/ Matt Strottman

Name: Matt Strottman

Title: CFO of In-Q-Tel, Inc., the manager of the fund.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

LEERINK SWANN HOLDINGS, LLC

By: [illegible]

Name: _____

Title: _____

LEERINK SWANN CO-INVESTMENT FUND, LLC

By: /s/ Joseph R. Gentile

Name: Joseph R. Gentile

Title: Management Committee Member

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

TECHNOGEN LIQUIDATING TRUST

By: /s/ Isaac Stein

Name: Isaac Stein

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

MARKWELL PARTNERS

By: [illegible]

Name: [illegible]

Title: Managing Partner

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

KILEY REVOCABLE TRUST

By: /s/ Thomas D. Kiley

Name: Thomas D. Kiley

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

STANLEY D. HAYDEN, AND HIS SUCCESSOR(S), AS THE TRUSTEE OF THE STANLEY D. HAYDEN FAMILY TRUST

By: /s/ Stanley D. Hayden

Name: Stanley D. Hayden

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

J.F. SHEA CO., INC. AS NOMINEE 1999-114

By: /s/ Ronald L. Lakey

Name: Ronald L. Lakey

Title: Vice President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Fredrick Stern

FREDRICK STERN

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ George S. Taylor

GEORGE S. TAYLOR

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ James W. Larrick M.D.

JAMES W. LARRICK M.D.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Stephen L. Parry

STEPHEN L. PARRY

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Thomas J. Parry

THOMAS J. PARRY

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Peter B. Dervan

PETER B. DERVAN

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ John M. Harland

JOHN M. HARLAND

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Matthew Frank

MATTHEW FRANK

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Alejandro Berenstein M.D.

ALEJANDRO BERENSTEIN M.D.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Patrick Tenney

PATRICK TENNEY

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Herbert L. Heyneker

HERBERT L. HEYNEKER

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

STEPHEN J. WEISS AND URSULA G. WEISS, TRUSTEES OF THE WEISS FAMILY TRUST 1996 TRUST

By: /s/ Stephen J. Weiss

Name: Stephen J. Weiss

Title: Trustee

/s/ Stephen J. Weiss
STEPHEN J. WEISS

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Paul Machle

PAUL MACHLE

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Fred St. Goar

FRED ST. GOAR

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Gary R. Bang

GARY R. BANG

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Michael H. McKay

MICHAEL H. MCKAY

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Alfred J. Mandel

ALFRED J. MANDEL

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Peter S. Heinecke

PETER S. HEINECKE

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ Pauline van Ysendoorn

PAULINE VAN YSENDOORN

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s Erik Van Der Burg

ERIK VAN DER BURG

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

CLARK-BOYD FAMILY TRUST

By: /s/ Kenneth A. Clark

Name: Kenneth A. Clark

Title:

/s/ Kenneth A. Clark

KENNETH A. CLARK

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

ANALIZA, INC.

By: /s/ Arnon Chait

Name: Arnon Chait

Title: President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

/s/ John E. Strobeck PhD M.D.

JOHN E. STROBECK PHD M.D.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

ADVISORY TRUST COMPANY OF DELAWARE, CUSTODIAN FOR SANDRA KAY ROTH IRA

By: /s/ Ramona Cisneros

Name: Ramona Cisneros

Title: Trust Administrator

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

NR07, LLC

By: /s/ Sumner Rosenberg

Name: Sumner Rosenberg

Title: Manager

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

TTC FUND I, LLC

By: /s/ Philip H. Albert

Name: Philip H. Albert

Title:

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

ERIK T. ENGELSON, TRUSTEE OF THE ERIK T. ENGELSON TRUST UTD DATED MARCH 29, 2000

By: /s/ Erik T. Engelson

Name: Erik T. Engelson

Title: Trustee

ERIK T. ENGELSON, TRUSTEE OF THE ELISABETH NORTH KUECHLER ENGELSON TRUST UTA DATED JANUARY 17, 2001

By: /s/ Erik T. Engelson

Name: Erik T. Engelson

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

ROBERT D. MCCULLOCH AND KATHLEEN M. MCCULLOCH, TRUSTEES OR THEIR SUCCESSOR(S) OF THE ROBERT D. MCCULLOCH AND KATHLEEN M. MCCULLOCH FAMILY TRUST DATED NOVEMBER 19, 1997

By: /s/ Robert D. McCulloch

Name: Robert D. McCulloch

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

ADVISORY TRUST COMPANY OF DELAWARE, CUSTODIAN FOR FRANK RUDERMAN ROTH IRA

By: /s/ Ramona Cisneros

Name: Ramona Cisneros

Title: Trust Adminstrator

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

THE CONDON FAMILY TRUST

By: /s/ Thomas J. Condon

Name: Thomas J. Condon

Title: TTE

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

HEALTH CARE ADMINISTRATION COMPANY

By: /s/ Gary L. Bowers

Name: Gary L. Bowers

Title: President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

GLAXOSMITHKLINE LLC

By: /s/ William J. Mosher

Name: William J. Mosher

Title: Vice President & Secretary

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

BURWEN FAMILY TRUST U/D/T DATED 9/30/88

By: /s/ David M. Burwen

Name: David M. Burwen

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

MICHAEL J. REARDON TRUST AGREEMENT DATED JUNE 5, 1996

By: /s/ Michael J. Reardon

Name: Michael J. Reardon

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

HENRY P. MASSEY, JR. TTEE MASSEY FAMILY TRUST U/A DTD 7/06/88

By: /s/ Henry P. Massey

Name: Henry P. Massey

Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

THE V FOUNDATION FOR CANCER RESEARCH

By: /s/ Nick Valvano

Name: Nick Valvano

Title: CEO

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

LEO J. PARRY, JR. AND ROBERTA J. PARRY TTEES PARRY FAMILY REVOCABLE TRUST DTD 01/22/97

By: /s/ Leo J. Parry and Roberta J. Parry

Name: Leo J. Parry and Roberta J. Parry

Title: Trustees

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

WILLIAM S. BROWN AND BARBARA G. BROWN, OR THEIR SUCCESSORS, AS TRUSTEES OF THE BROWN FRT DTD 3/10/99

By: /s/ William S. Brown

Name: William S. Brown

Title: Co-Trustee

By: /s/ Barbara G. Brown

Name: Barbara G. Brown

Title: Co-Trustee

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

2008 STEPHEN RONALD QUAKE AND ATHINA PEIOU-QUAKE REVOCABLE TRUST DATED AUGUST 14, 2008

By: /s/ Stephen Quake

Name: Stephen Quake

Title:

EXHIBIT A

NEW INVESTORS

New Investors

Artemis Health, Inc.

2008 Stephen Ronald Quake and Athina Peiou-Quake Revocable Trust dated August 14, 2008

ABT Holding Company

Advisory Trust Company of Delaware, Custodian for Frank Ruderman Roth Ira

Advisory Trust Company of Delaware, Custodian for Sandra Kay Roth IRA

Alejandro Berenstein, M.D.

Allan May, Trustee Intervivos Trust dated 5/14/91

Alfred J. Mandel

AllianceBernstein Venture Fund I, L.P.

Alloy Partners 2002, L.P.

Alloy Ventures 2002, L.P.

Alloy Ventures 2005, L.P.

Analiza, Inc.

Biomedical Sciences Investment Fund Pte Ltd

Bradford S. Goodwin and Cathy W. Goodwin as Trustees of The Goodwin Family Trust u/a/d 7/30/97

Bruce Burrows

Burwen Family Trust u/d/t dated 9/30/08

Clark/Boyd Trust

Cross Creek Capital, L.P.

Cross Creek Employees' Fund, L.P.

David Scott Frampton and Gaja Roberta Frampton, as Trustees of the Frampton Family Trust dtd 4/25/03

Dwayne Hardy

Edward R. Lemoure

Erik Van Der Burg

Erik T. Engelson, Trustee of the Elisabeth North Kuechler Engelson Trust uta dated January 17, 2001

Erik T. Engelson, Trustee of the Erik T. Engelson Trust u/t/d dated March 29, 2000

EuclidSR Biotechnology Partners, L.P.

EuclidSR Partners, L.P.

New Investors

Ferguson/Egan Family Trust dated 6/28/99

Fidelity Contrafund: Fidelity Contrafund

Fidelity Contrafund: Fidelity Advisor New Insights Fund

Fred St. Goar

Fredrick Stern

Gary R. Bang

General Electric Capital Corporation

George S. Taylor

Glaxo Group Limited

Health Care Administration Company

Heath Lukatch

Henry P. Massey, Jr., Trustee of the Massey Family Trust udt dated July 6, 1988

Herbert L. Heyneker

In-Q-Tel, Inc.

InterWest Investors VII, L.P.

InterWest Partners VII, L.P.

Invus, L.P.

J.F. Shea Co., Inc., a Nominee 1999-114

Jacaranda Partners

James H. Eberwine PhD

James W. Larrick, M.D.

John E. Stobeck, PhD, M.D.

John M. Harland

Jonathan S. Hoot and Andrea T. Hoot, Trustees of the Hoot Family Revocable Trust dtd 3/16/99

Kenneth A. Clark

Kiley Revocable Trust

Leerink Swann Co-Investment Fund, LLC

Leerink Swann Holdings, LLC

Lehman Brothers Healthcare Venture Capital, L.P.

Lehman Brothers Offshore Partnership Account 2000/2001, L.P.

Lehman Brothers P.A., LLC

New Investors

Lehman Brothers Partnership Account 2000/2001, L.P.

Leo J. Parry, Jr. and Roberta J. Parry, TTEES Parry Family Revocable Trust dtd 01/22/97

Lilly BioVentures, Eli Lilly & Company

Markwell Partners

Matthew Frank

Michael McKay

Michael J. Reardon Trust Agreement dated June 5, 1996

Newman Family Investment Partnership

NR07, LLC

Oculus Pharmaceuticals, Inc.

Pat and Betsy Collins Revocable Trust

Patrick Tenney

Paul Machle

Pauline Van Ysendoorn

Peter B. Dervan

Peter S. Heinecke

Rhett E. Brown

Robert D. Mcculloch and Kathleen M. Mcculloch, Trustee or their successor(s) of the Robert D. Mcculloch and Kathleen M. Mcculloch Family Trust dated November 19, 1997

Robert F. Kornegay, Jr. Revocable Trust u/d/t dated May 27, 2004, Robert F. Kornegay, Jr. Trustee

Sightline Healthcare Fund III, L.P.

SMALLCAP World Fund, Inc.

GlaxoSmithKline LLC

Stanley D. Hayden, and his successor(s), as the Trustee of the Stanley D. Hayden Family Trust

Stephen J. Weiss

Stephen J. Weiss and Ursula G. Weiss, Trustees of the Weiss Family 1996 Trust

Stephen L. Parry

Technogen Liquidating Trust

The Condon Family Trust

The V Foundation for Cancer Research

Thomas J. Parry

New Investors

Timothy P. Lynch

TTC Fund I, LLC

Variable Insurance Products Fund II: Contrafund Portfolio

Versant Affiliates Fund 1-A, L.P.

Versant Affiliates Fund 1-B, L.P.

Versant Side Fund I, L.P.

Versant Venture Capital I, L.P.

Wasatch Funds, Inc.

William L. Caton III, M.D.

William S. Brown and Barbara G. Brown, or their successors, as trustees of The Brown FRT dtd 3/10/99

WS Investment Company, LLC (2009C)

WS Investment Company, LLC (2009A)

EXHIBIT B

SCHEDULE OF FOUNDERS

Gajus V. Worthington
c/o Fluidigm Corporation
7000 Shoreline Court, Suite 100
South San Francisco, CA 94080

Stephen R. Quake
636 Alvarado Row
Stanford, CA , 94305

EXHIBIT C

PRIOR INVESTORS

Certain Warrantholders

In-Q-Tel Employee Fund, LLC

In-Q-Tel, Inc.

Lighthouse Capital Partners V, L.P.

Prior Series E Investors

Alfred J. Mandel

AllianceBernstein Venture Fund I, L.P.

Alloy Partners 2002, L.P.

Alloy Ventures 2002, L.P.

Alloy Ventures 2005, L.P.

Biomedical Sciences Investment Fund Pte Ltd

Bruce Burrows

Bruce Burrows

Clearmoon & Co.

Clipperbay & Co.

EuclidSR Biotechnology Partners, L.P.

EuclidSR Partners, L.P.

Ferguson/Egan Family Trust Dated 6/28/99

Fredrick H. Stern

Health Care Administration Company

In-Q-Tel Employee Fund, LLC

In-Q-Tel, Inc.

Interwest Investors VII, L.P.

Interwest Partners VII, L.P.

John M. Harland

Leerink Swann Co-Investment Fund, LLC

Leerink Swann Holdings, LLC

Lehman Brothers Healthcare Venture Capital L.P.

Lehman Brothers Offshore Partnership Account 2000/2001, L.P.

Prior Series E Investors

Lehman Brothers P.A. LLC

Lehman Brothers Partnership Account 2000/2001, L.P.

Lilly Bio Ventures, Eli Lilly and Company

Fidelity Contrafund-Fidelity Advisor New Insights Fund

Fidelity Contrafund-Fidelity Contrafund

Variable Insurance Products Fund II-Contrafund Portfolio

PACO c/o 80-16-200-1037662

PACO c/o 80-16-200-1037670

Pauline E. van Ysendoorn

Rhett E. Brown

SightLine Healthcare Fund III, L.P.

The Condon Family Trust

The V Foundation for Cancer Research

Versant Affiliates Fund 1-A, L.P.

Versant Affiliates Fund 1-B, L.P.

Versant Side Fund I, L.P.

Versant Venture Capital I, L.P.

Prior Series D Investors

Alejandro Berenstein, MD

Allan Johnston

Alloy Partners 2002, L.P.

Alloy Ventures 2005, L.P.

Beveren Company

Biomedical Sciences Investment Fund Pte Ltd

Bradford W. Baer

Bruce Burrows

Clark-Boyd Family Trust

David S. Frampton and Gaja Roberta Frampton, as Trustees of the Frampton Family Trust u/a/d 4/25/03

Edward R. LeMoure

Erik Vanderburg

EuclidSR Biotechnology Partners, L.P.

EuclidSR Partners, L.P.

Prior Series D Investors

Ferguson/Egan Family Trust

Frances Hamilton Arnold

Frederick Stern

Gary R. Bang

GE Capital Equity Investments, Inc.

Health Care Administration Company

Henry P. Massey, Jr., Trustee of The Massey Family Trust UDT Dated July 6, 1988

Howard R. Engelson and Miriam T. Engelson Trustees of the Engelson Family Trust U/A DTD 05/26/1994

Interwest Investors VII, L.P.

Interwest Partners VII, L.P.

Invus, L.P.

J.F. Shea Co., Inc., as Nominee 1999-114

John M. Harland

Kiley Revocable Trust

Lehman Brothers Healthcare Venture Capital, L.P.

Lehman Brothers Offshore Partnership Account 2000/2001, L.P.

Lehman Brothers P.A. LLC

Lehman Brothers Partnership Account 2000/2001, L.P.

Lilly BioVentures, Eli Lilly and Company

Markwell Partners

Pat and Betsy Collins Revocable Trust

Patrick Tenney

Paul Machle

Piper Jaffray Healthcare Fund III, L.P.

Robert D. McCulloch and Kathleen M. McCulloch, Trustee, or their successor(s) of THE ROBERT D. McCULLOCH AND KATHLEEN M. McCULLOCH FAMILY TRUST AGREEMENT, DATED NOVEMBER 19, 1997

Robert F. Kornegay, Jr., Trustee of the Robert Kornegay Trust U/A DTD May 27, 2004

Stanley D. Hayden

The V Foundation for Cancer Research

Versant Affiliates Fund 1-A, L.P.

Versant Affiliates Fund 1-B, L.P.

Versant Side Fund I, L.P.

Prior Series D Investors

Versant Venture Capital I, L.P.

Prior Series C Investors

Alfred J. Mandel

Allan Johnston

Beveren Company

Bradford W. Baer

Bruce Burrows

Burwen Family Trust U/D/T dated 9/30/88

Charles R. Engles

David Frampton, Trustee of 2000 David Scott Frampton Trust

Erik T. Engelson, Trustee of the Elizabeth North Kuechler Engelson Trust UDT dated January 17, 2001

Erik T. Engelson, Trustee of the Eric T. Engelson Trust UDT dated March 29, 2000

EuclidSR Biotechnology Partners, L.P.

EuclidSR Partners, L.P.

Frances Arnold

GE Capital Equity Investments, Inc.

George S. Taylor

Glaxo Group Limited

Health Care Administrative Co.

Heath Lukatch

Henry P. Massey, Jr., Trustee, The Massey Family Trust U/A DTD 7/06/88

Herbert L. Heyneker

Howard R. Engelson

Interwest Investors VII, L.P.

Interwest Partners VII, L.P.

James W. Larrick

John E. Strobeck, MD PhD

Kenneth A. Clark

Kiley Revocable Trust

Lehman Brothers Healthcare Venture Capital L.P.

Lehman Brothers Offshore Partnership Account 2000/2001, L.P.

Lehman Brothers P.A. LLC

Prior Series C Investors

Lehman Brothers Partnership Account 2000/2001, L.P.

Leo J. Parry and Roberta J. Parry TTEES Parry Family Revocable Trust DTD 1/22/97

Lilly BioVentures, Eli Lilly and Company

Markwell Partners

Michael H. McKay

Michael J. Reardon

Paul Machle

Peter S. Heinecke

Piper Jaffray Healthcare Fund III, L.P.

Security Trust Co., Custodian FBO Frank Ruderman IRA/RO

Singapore Bio-Innovations Pte Ltd

SmithKline Beecham Corporation

Stephen J. Weiss

Stephen L. Parry

TBCC Funding Trust II

The Condon Family Trust Dated 4/5/90

The Hoot Family Revocable Trust

Thomas J. Parry

Timothy P. Lynch

Versant Affiliates Fund 1-A, L.P.

Versant Affiliates Fund 1-B, L.P.

Versant Side Fund I, L.P.

Versant Venture Capital I, L.P.

William S. Brown and Barbara G. Brown, or their successors, as Trustees of the Brown Family Revocable Trust dated March 10, 1999

WS Investment Company, LLC (2001D)

Prior Series A and Series B Investors

Versant Venture Capital I, L.P.

Versant Side Fund I, L.P.

Versant Affiliates Fund 1-A, L.P.

Versant Affiliates Fund 1-B, L.P.

Interwest Partners VII, L.P.

Prior Series A and Series B Investors

Interwest Investors VII, L.P.

Technogen Associates, L.P.

Frances Arnold

Pat and Betsy Collins Revocable Trust

The 2000 David Scott Frampton Trust

Stanley D. Hayden

TTC Fund I, LLC

Traff Family 1993 Irrevocable Trust

Stephen J. Weiss and Ursula G. Weiss, Trustees of the Weiss Family 1996 Trust

WS Investment Company 2000B

Bradford W. Baer

Thomas L. Barton

Beveren Company

Burwen Family Trust U/D/T dated 9/30/88

Bruce Burrows

Matthew Collier

Peter B. Dervan

John East

Pamela M. East

James H. Eberwine

Charles R. Engles

Ferguson/Egan Family Trust Dated 6/28/99

Matthew Frank

Bradford S. Goodwin and Cathy W. Goodwin, as Trustees of the Goodwin Family Trust U/A/D 7/30/97

Dwayne Hardy

John M. Harland

Health Care Administration Company

The Heckmann Family Trust / Desert Springs Investment

Peter S. Heinecke

Jonathan S. Hoot and Andrea T. Hoot, Trustees of the 1999 Hoot Family Revocable Trust DTD 3/16/99

Joseph M. Jacobsen

Kiley Revocable Trust

James W. Larrick, M.D. Ph.D

Prior Series A and Series B Investors

Markwell Partners

Henry P. Massey, Jr., TTEE Massey Family Trust U/A DTD 7/06/88

Allan May, Trustee, Intervivos Trust Dated 5/14/91

Charles C. Moore

Newman Family Investment Partnership

Fredrick Stern

Fred St. Goar

George S. Taylor

Traff Family 1993 Irrevocable Trust / Desert Springs Investment

WS Investment Company 99B

William L. Caton III M.D.

Pat and Betsy Collins Revocable Trust

The Condon Family Trust

Stanley D. Hayden

Jacaranda Partners

J.F. Shea Co., Inc. as Nominee 1999-114

FLUIDIGM CORPORATION

AMENDMENT NO. 1

TO NINTH AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

This Amendment No. 1 (this "Amendment") to that certain Ninth Amended and Restated Investor Rights Agreement, dated as of November 16, 2009 (the "Rights Agreement"), by and among Fluidigm Corporation, a Delaware corporation (the "Company"), and the Investors and Founders named therein is entered into effective as of June 14, 2010, by and among the Company and the undersigned Investors constituting the Holders of at least two-thirds (2/3) of the outstanding shares of the Registrable Securities now held by all Holders (assuming the exercise or conversion of all outstanding Eligible Securities). Capitalized terms not defined herein have the meanings set forth in the Rights Agreement.

RECITALS

WHEREAS, on June 14, 2010, the Company and Lighthouse Capital Partners V, L.P. ("Lighthouse") entered into that certain Amendment No. 8 (the "Lighthouse Amendment") to Loan and Security Agreement No. 4561, dated as of March 29, 2005, as amended;

WHEREAS, under the terms of the Lighthouse Amendment, the Company agreed to amend and restate certain warrants to purchase preferred stock that the Company previously issued to Lighthouse (the "Restated Warrants") to provide that such Restated Warrants are exercisable for the right to purchase shares of a newly created series of the Company's preferred stock (the "Restated Warrant Shares");

WHEREAS, under the terms of the Lighthouse Amendment, the Company agreed to issue to Lighthouse a new warrant to purchase preferred stock (the "Additional Warrant") exercisable for the right to purchase up to that number of shares of the Company's Preferred Stock (as defined in the Additional Warrant) equal to $699,760 divided by the Purchase Price (as defined in the Additional Warrant) (the "Additional Warrant Shares");

WHEREAS, under the terms of the Restated Warrants and the Additional Warrant, the Company agreed to grant to Lighthouse the rights of a "Holder" and "Warrantholder" under the Rights Agreement, including the registration rights contained therein, with respect to the Restated Warrant Shares and the Additional Warrant Shares;

WHEREAS, the Company and the undersigned Investors desire to amend the Rights Agreement to grant to Lighthouse the rights of a "Holder" and "Warrantholder" under the Rights Agreement and provide for registration rights with respect to the Restated Warrant Shares and the Additional Warrant Shares;

WHEREAS, the Company and the undersigned Investors desire to amend the definition of "Warrant Shares" under the Rights Agreement to delete language that refers to certain warrants to purchase shares of the Company's preferred stock that are no longer outstanding;

WHEREAS, pursuant to Section 6.7 of the Rights Agreement, the Rights Agreement may be amended with the written consent of the Company and Holders of at least two-thirds (2/3) of the outstanding shares of the Registrable Securities then held by Holders (assuming the exercise or conversion of all outstanding Eligible Securities) (the "Requisite Holders"); and

WHEREAS, the Company and the undersigned Investors constituting the Requisite Holders desire to amend the Rights Agreement to provide for the foregoing changes.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto mutually agree as follows:

AGREEMENT

SECTION 7 Amendment and Restatement of Definition. The definition of "Lighthouse Preferred Warrants" set forth in Section 1.1 is hereby amended and restated in its entirety as follows:

> ""**Lighthouse Preferred Warrants**" shall mean (i) the Amended and Restated Preferred Stock Purchase Warrant dated June 14, 2010, pursuant to which Lighthouse Capital Partners V, L.P. ("**Lighthouse**") may purchase shares of the Company's authorized Series D-1 Preferred Stock; (ii) the Amended and Restated Preferred Stock Purchase Warrant dated June 14, 2010, pursuant to which Lighthouse may purchase shares of the Company's authorized Series E-1 Preferred Stock; (iii) the Amended and Restated Preferred Stock Purchase Warrant dated June 14, 2010, pursuant to which Lighthouse may purchase shares of the Company's authorized Series E-1 Preferred Stock; and (iv) the Preferred Stock Purchase Warrant dated June 14, 2010, pursuant to which Lighthouse may purchase shares of the Company's authorized Preferred Stock."

SECTION 8 Amendment and Restatement of Definition. The definition of "Warrant Shares" set forth in Section 1.1 is hereby amended and restated in its entirety as follows:

> ""**Warrant Shares**" shall mean the shares of Common Stock of the Company issued or issuable upon conversion of the (i) Series C Preferred Stock issued or issuable upon exercise or conversion of (A) the warrant to purchase up to 17,500 shares of Series C Preferred Stock issued to TBCC Funding Trust II ("**TBCC**") pursuant to the Master Loan and Security Agreement dated March 27, 2002 by and between the Company and Transamerica Technology Finance Corporation; and (B) the warrant to purchase up to 31,008 shares of Series C Preferred Stock issued to General Electric Capital Corporation ("**GE Capital**") in connection with the Master Security Agreement dated as of November 8, 2002, as amended (the "**Master Security Agreement**") by and between the Company and GE Capital; (ii) the Series D Preferred Stock issued or issuable upon exercise or conversion of (A) the warrant to purchase up to 37,500 shares of Series D Preferred Stock dated March 18, 2004 and issued to GE

Capital in connection with extensions of credit to the Company; and (B) the Lighthouse Preferred Warrants; (iii) the Series D-1 Preferred Stock issued or issuable upon exercise or conversion of the Lighthouse Preferred Warrants; (iv) the Series E Preferred Stock issued or issuable upon exercise or conversion of the warrants to purchase shares of Preferred Stock of the Company issued to certain Investors under the Note and Warrant Purchase Agreement dated as of August 25, 2009; and (v) the Series E-1 Preferred Stock issued or issuable upon exercise or conversion of the Lighthouse Preferred Warrants. TBCC, GE Capital, and Lighthouse are collectively referred to herein as "**Warrantholders**."".

SECTION 9 Governing Law. This Amendment shall be construed in accordance with, and governed in all respects by, the laws of the State of California, as applied to agreements entered into, and to be performed entirely in such state, between residents of such state.

SECTION 10 Rights Agreement. Wherever necessary, all other terms of the Rights Agreement are hereby amended to be consistent with the terms of this Amendment. Except as specifically set forth herein, the Rights Agreement shall remain in full force and effect

SECTION 11 Counterparts. This Amendment may be executed in any number of counterparts, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument.

* * *

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

COMPANY:

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington
Gajus V. Worthington,
President and Chief Executive Officer

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

ABT HOLDING COMPANY
(FORMERLY KNOWN AS ATHERSYS, INC.)

By: /s/ Laura Campbell

Name: Laura Campbell

Title: VP - Finance

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

ALLOY VENTURES 2005, L.P.

By: Alloy Ventures 2005, LLC
its General Partner

By: /s/ [Illegible]

Name: _____

Title: Managing Member of Alloy Ventures 2005 LLC
Managing Member of Alloy Ventures 2005, L.P.

ALLOY VENTURES 2002, L.P.
ALLOY PARTNERS 2002, L.P.

By: Alloy Ventures 2002, LLC
its General Partner

By: /s/ [Illegible]

Name: _____

Title: Managing Member of Alloy Ventures 2002 LLC
Managing Member of Alloy Partners 2002, L.P.
and Alloy Ventures 2002, L.P.

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

BIOMEDICAL SCIENCES INVESTMENT FUND PTE LTD

By: /s/ Chu Swee Yeok

Name: Chu Swee Yeok

Title: Director

SINGAPORE BIO-INNOVATIONS PTE LTD

By: /s/ Eugene Khoo Kay Jin

Name: Eugene Khoo Kay Jin

Title: Director

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

VERSANT AFFILIATES FUND 1-A, L.P.
VERSANT AFFILIATES FUND 1-B, L.P.
VERSANT SIDE FUND I, L.P.
VERSANT VENTURE CAPITAL I, L.P.

By: Versant Ventures I, LLC
its General Partner

By: /s/ Samuel D. Colella

Name: Samuel D. Colella

Title: Managing Director

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

LEHMAN BROTHERS HEALTHCARE VENTURE CAPITAL L.P.

By: Lehman Brothers HealthCare Venture Capital Associates L.P., its General Partner

By: LB I Group Inc., its General Partner

By: /s/ Ashvin Rao

Name: Ashvin Rao

Title: Vice President

LEHMAN BROTHERS P.A. LLC

By: /s/ Ashvin Rao

Name: Ashvin Rao

Title: Vice President

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

LEHMAN BROTHERS PARTNERSHIP ACCOUNT 2000/2001, L.P.

By: LB I Group Inc.,
its General Partner

By: /s/ Ashvin Rao

Name: Ashvin Rao

Title: Vice President

LEHMAN BROTHERS OFFSHORE PARTNERSHIP ACCOUNT 2000/2001, L.P.

By: LB I Offshore Partners Group Ltd.,
its General Partner

By: /s/ Ashvin Rao

Name: Ashvin Rao

Title: Vice President

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

EUCLIDSR PARTNERS, L.P.

By: EuclidSR Associates, L.P.,
its General Partner

By: /s/ Raymond J. Whitaker

Name: Raymond J. Whitaker

Title: General Partner

EUCLIDSR BIOTECHNOLOGY PARTNERS, L.P.

By: EuclidSR Biotechnology Associates, L.P.,
its General Partner

By: /s/ Raymond J. Whitaker

Name: Raymond J. Whitaker

Title: General Partner

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

INTERWEST PARTNERS VII, L.P.

By: InterWest Management Partners VII, LLC,
its General Partner

By: /s/ W. Stephen Holmes

Name: W. Stephen Holmes

Title: Managing Director

INTERWEST INVESTORS VII, L.P.

By: InterWest Management Partners VII, LLC,
its General Partner

By: /s/ W. Stephen Holmes

Name: W. Stephen Holmes

Title: Managing Director

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

SMALLCAP WORLD FUND, INC.

By: Capital Research and Management Company, its investment adviser

By: /s/ Michael J. Downer

Name: Michael J. Downer

Title: Senior Vice President and Secretary

Approved for Signature by CRMC Legal Dept. WRB

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

FIDELITY CONTRAFUND:
FIDELITY ADVISOR NEW INSIGHTS FUND

By: /s/ Jeffrey Christian

Name: Jeffrey Christian

Title: Deputy Treasurer

FIDELITY CONTRAFUND: FIDELITY CONTRAFUND

By: /s/ Jeffrey Christian

Name: Jeffrey Christian

Title: Deputy Treasurer

VARIABLE INSURANCE PRODUCTS FUND II: CONTRAFUND PORTFOLIO

By: /s/ Jeffrey Christian

Name: Jeffrey Christian

Title: Deputy Treasurer

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

LEERINK SWANN HOLDINGS, LLC

By: /s/ Joseph R. Gentile

Name: Joseph R. Gentile

Title: CAO, CFO

LEERINK SWANN CO-INVESTMENT FUND, LLC

By: /s/ Joseph R. Gentile

Name: Joseph R. Gentile

Title: CAO, CFO

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

CROSS CREEK CAPITAL, L.P.

By: Cross Creek Capital GP, L.P.,
its Sole General Partner

By: Cross Creek Capital, LLC,
its Sole General Partner

By: Wasatch Advisors, Inc.,
its Sole Member

By: /s/ Daniel Thurber

Name: Daniel Thurber

Title: Vice President

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

CROSS CREEK CAPITAL EMPLOYEES' FUND, L.P.

By: Cross Creek Capital GP, L.P.,
its Sole General Partner

By: Cross Creek Capital, LLC,
its Sole General Partner

By: Wasatch Advisors, Inc.,
its Sole Member

By: /s/ Daniel Thurber

Name: Daniel Thurber

Title: Vice President

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

WASATCH FUNDS, INC.
Wasatch Small Cap Growth Fund

By: Wasatch Advisors, Inc.,
its Investment Adviser

By: /s/ Daniel Thurber

Name: Daniel Thurber

Title: Vice President

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

SIGHTLINE HEALTHCARE FUND III, L.P.

By: /s/ Maureen Harder

Name: Maureen Harder

Title: Managing Director

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

OCULUS PHARMACEUTICALS, INC.

By: /s/ William Lehmann

Name: William (BJ) Lehmann

Title: President

FLUIDIGM CORPORATION

AMENDMENT NO. 2

TO NINTH AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

This Amendment No. 2 (this "Amendment") to that certain Ninth Amended and Restated Investor Rights Agreement, dated as of November 16, 2009 (the "Rights Agreement") and as amended on June 2, 2010, by and among Fluidigm Corporation, a Delaware corporation (the "Company"), and the Investors and Founders named therein is entered into effective as of August 16, 2010, by and among the Company and the undersigned Investors constituting the Holders of at least two-thirds (2/3) of the outstanding shares of the Registrable Securities now held by all Holders (assuming the exercise or conversion of all outstanding Eligible Securities). Capitalized terms not defined herein have the meanings set forth in the Rights Agreement.

RECITALS

WHEREAS, on July 8, 2010, the Company extended an offer to all holders of warrants to acquire the Company's preferred stock with an exercise price in excess of $7.00 per share (each an "Eligible Warrant" and together, the "Eligible Warrants"), the opportunity to amend their respective Eligible Warrants to provide that (i) the exercise price of such amended Eligible Warrants (the "Amended Eligible Warrant") will be $7.00 per share and (ii) such Amended Eligible Warrants will be exercisable for (a) a number of shares of an alternative series of the Company's preferred stock (the "Shadow Preferred Stock") equal to the number of shares of Company's preferred stock currently issuable upon exercise of the Eligible Warrant and (b) an equivalent number of shares of the Company's common stock, subject to such holder's agreement to exercise the Amended Eligible Warrant immediately in full and for cash (the "Offer");

WHEREAS, the series of Shadow Preferred Stock to be issued upon exercise of the Amended Eligible Warrants pursuant to the Offer shall be comprised of Series C-1 preferred stock, Series D-1 preferred Stock and Series E-1 preferred stock;

WHEREAS, the Company and the undersigned stockholders desire that the holders of Series C-1 preferred stock, Series D-1 preferred stock and Series E-1 preferred stock issued upon exercise of the Amended Eligible Warrants shall have the same rights as Holders (as defined in the Rights Agreements), including registration rights, as the Company's other preferred stock set forth in the Rights Agreement;

WHEREAS, pursuant to Section 6.7 of the Rights Agreement, the Rights Agreement may be amended with the written consent of the Company and Holders of at least two-thirds (2/3) of the outstanding shares of the Registrable Securities then held by Holders (assuming the exercise or conversion of all outstanding Eligible Securities) (the "Requisite Holders"); and

WHEREAS, the Company and the undersigned Investors constituting the Requisite Holders desire to amend the Rights Agreement to provide for the foregoing changes.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto mutually agree as follows:

AGREEMENT

SECTION 12 Addition of New Definitions in Section 1.1. The following new definitions are hereby added to Section 1.1:

""**Amended Eligible Warrant(s)**" shall mean those Eligible Warrants modified pursuant to and in accordance with the Offer."

""**Eligible Warrant(s)**" shall mean those warrants to acquire the Company's preferred stock with an exercise price in excess of $7.00 per share."

""**Offer**" shall mean that certain offer extended on or about July 8, 2010 to all holders of Eligible Warrants, the opportunity to amend their respective Eligible Warrants to provide that (i) the exercise price of the Amended Eligible Warrants will be $7.00 per share and (ii) the Amended Eligible Warrants will be exercisable for (a) a number of shares of Shadow Preferred Stock equal to the number of shares of Company's preferred stock currently issuable upon exercise of the Eligible Warrant and (b) an equivalent number of shares of the Company's common stock, subject to such holder's agreement to exercise the Amended Eligible Warrant immediately in full and for cash."

""**Shadow Preferred Stock**" shall mean that certain series of the Company's preferred stock having the same rights, preferences and privileges as the original series of preferred stock issuable upon exercise of the Eligible Warrant, except that the original issuance price and liquidation preference of such series of preferred stock shall be $7.00. Such Shadow Preferred Stock shall consist of "Series C-1 Preferred Stock," "Series D-1 Preferred Stock" and "Series E-1 Preferred Stock," as applicable.

SECTION 13 Amendment and Restatement of Definition. The definition of "Eligible Securities" set forth in Section 1.1 is hereby amended and restated in its entirety as follows:

""**Eligible Securities**" shall mean (i) the Series A Preferred Stock issued pursuant to the Series A Preferred Stock Purchase Agreement dated December 1, 1999; (ii) the Series B Preferred Stock issued pursuant to the Series B Preferred Stock Purchase Agreement dated July 5, 2000; (iii) the Series C Preferred Stock issued pursuant to the Series C Preferred Stock Purchase Agreement dated October 23, 2001; (iv) the Series C Preferred Stock issued pursuant to the Series C Preferred Stock Purchase Agreement dated November 1, 2002; (v) the Series C Preferred Stock issued pursuant to the Series C Preferred Stock and Warrant Purchase Agreement dated

September 22, 2003; (vi) the Series D Preferred Stock issued pursuant to the Series D Preferred Stock Purchase Agreement dated December 18, 2003; (vii) the Series D Preferred Stock issued pursuant to the Series D Preferred Stock Purchase Agreement dated August 16, 2005; (viii) the Series D Preferred Stock issued upon conversion of convertible promissory note(s) issued pursuant to the Convertible Promissory Note Purchase Agreement (the "**CNPA**") dated December 18, 2003, as amended by Amendment No. 1 to Convertible Note Purchase Agreement dated December 17, 2004, between the Company and Biomedical Sciences Investment Fund Pte Ltd (the "**BMSIF**"); (ix) the Series D Preferred Stock issued upon conversion of convertible promissory note(s) issued in connection with the Convertible Note Agreement (the "**CNA**") dated December 18, 2003, between the Company and Invus, L.P. (the "**Invus**"); (x) the Series E Preferred Stock issued pursuant to the Series E Preferred Stock Purchase Agreement dated June 13, 2006, as amended (the "**Prior Purchase Agreement**"); (xi); the Series E Preferred Stock issued pursuant to the 2009 Purchase Agreement; (xii) the Series C-1 Preferred Stock, the Series D-1 Preferred Stock and the Series E-1 Preferred Stock issued upon exercise of the Amended Eligible Warrants, as applicable, pursuant to and in accordance with the Offer; (xiii) all Securities acquired by any Investor pursuant to the rights of first offer described in Sections 3 or 4 of this Agreement; and (xiv) any Securities issued with respect to the foregoing upon any stock split, stock dividend, recapitalization, or similar event or upon any exercise or conversion, as applicable."

SECTION 14 Governing Law. This Amendment shall be construed in accordance with, and governed in all respects by, the laws of the State of California, as applied to agreements entered into, and to be performed entirely in such state, between residents of such state.

SECTION 15 Rights Agreement. Wherever necessary, all other terms of the Rights Agreement are hereby amended to be consistent with the terms of this Amendment. Except as specifically set forth herein, the Rights Agreement shall remain in full force and effect

SECTION 16 Counterparts. This Amendment may be executed in any number of counterparts, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument.

* * *

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

COMPANY:

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington
Gajus V. Worthington,
President and Chief Executive Officer

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

ALLOY VENTURES 2005, L.P.

By: Alloy Ventures 2005, LLC
its General Partner

By: /s/ [Illegible]

Name: _____

Title: Managing Member of Alloy Ventures 2005 LLC
Managing Member of Alloy Ventures 2005, L.P.

ALLOY VENTURES 2002, L.P.
ALLOY PARTNERS 2002, L.P.

By: Alloy Ventures 2002, LLC
its General Partner

By: /s/ [Illegible]

Name: _____

Title: Managing Member of Alloy Ventures 2002 LLC
Managing Member of Alloy Partners 2002, L.P.
and Alloy Ventures 2002, L.P.

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

SIGHTLINE HEALTHCARE FUND III, L.P.

By: /s/ Buzz Benson

Name: Buzz Benson

Title: Managing Director

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

INTERWEST PARTNERS VII, L.P.

By: InterWest Management Partners VII, LLC,
its General Partner

By: /s/ Michael Sweeney

Name: Michael Sweeney

Title: As agent for the general partner

INTERWEST INVESTORS VII, L.P.

By: InterWest Management Partners VII, LLC,
its General Partner

By: /s/ Michael Sweeney

Name: Michael Sweeney

Title: As agent for the general partner

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

FIDELITY CONTRAFUND:
FIDELITY ADVISOR NEW INSIGHTS FUND

By: /s/ Jeffrey Christian

Name: Jeffrey Christian

Title: Deputy Treasurer

FIDELITY CONTRAFUND: FIDELITY CONTRAFUND

By: /s/ Jeffrey Christian

Name: Jeffrey Christian

Title: Deputy Treasurer

VARIABLE INSURANCE PRODUCTS FUND II: CONTRAFUND PORTFOLIO

By: _____

Name: _____

Title: _____

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

EUCLIDSR PARTNERS, L.P.

By: EuclidSR Associates, L.P.,
its General Partner

By: /s/ Raymond J. Whitaker

Name: Raymond J. Whitaker

Title: General Partner

EUCLIDSR BIOTECHNOLOGY PARTNERS, L.P.

By: EuclidSR Biotechnology Associates, L.P.,
its General Partner

By: /s/ Raymond J. Whitaker

Name:

Title: General Partner

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

LILLY BIOVENTURES, ELI LILLY & COMPANY

By: /s/ S. Edward Torres

Name: S. Edward Torres

Title:

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

ALLIANCEBERNSTEIN VENTURE FUND I, L.P.

By: AllianceBernstein ESG Venture Management, L.P., its general partner

By: AllianceBernstein Global Derivatives Corporation, its general partner

By: /s/ Amy Raskin

Name: Amy Raskin

Title: Senior Vice President

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

VERSANT AFFILIATES FUND 1-A, L.P.
VERSANT AFFILIATES FUND 1-B, L.P.
VERSANT SIDE FUND I, L.P.
VERSANT VENTURE CAPITAL I, L.P.

By: Versant Ventures I, LLC
its General Partner

By: /s/ Samuel D. Colella

Name: Samuel D. Colella

Title: Managing Director

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

/s/ Bruce Burrows

BRUCE BURROWS

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

ARTEMIS HEALTH, INC.
a Delaware Corporation

By: /s/ Richard P. Rava

Name: Richard P. Rava

Title: President

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

CROSS CREEK CAPITAL, L.P.

By: Cross Creek Capital GP, L.P.,
its Sole General Partner

By: Cross Creek Capital, LLC,
its Sole General Partner

By: Wasatch Advisors, Inc.,
its Sole Member

By: Daniel Thurber

Name: /s/ Daniel Thurber

Title: VP

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

CROSS CREEK CAPITAL EMPLOYEES' FUND, L.P.

By: Cross Creek Capital GP, L.P.,
its Sole General Partner

By: Cross Creek Capital, LLC,
its Sole General Partner

By: Wasatch Advisors, Inc.,
its Sole Member

By: /s/ Daniel Thurber

Name: Daniel Thurber

Title: VP

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

WASATCH FUNDS, INC.
Wasatch Small Cap Growth Fund

By: Wasatch Advisors, Inc.,
its Investment Adviser

By: /s/ Daniel Thurber

Name: Daniel Thurber

Title: VP

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first above written.

INVESTORS:

BIOMEDICAL SCIENCES INVESTMENT FUND PTE LTD

By: /s/ Chu Swee Yeok

Name: Chu Swee Yeok

Title: Director

SINGAPORE BIO-INNOVATIONS PTE LTD

By: /s/ Eugene Khoo Kay Jin

Name: Eugene Khoo Kay Jin

Title: Director

LOAN AND SECURITY AGREEMENTS

THIS LOAN AND SECURITY AGREEMENT No. 4561 (this *"Agreement")* is entered into as of March 29, 2005, by and between **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** *("Lender")* and **FLUIDIGM CORPORATION** , a California corporation *("Borrower"* or sometimes referred to herein as *"Debtor")* and sets forth the terms and conditions upon which Lender will lend and Borrower will repay money. In consideration of the mutual covenants herein contained, the parties agree as follows:

1. DEFINITIONS AND CONSTRUCTION

1.1 Definitions. Initially capitalized terms used and not otherwise defined herein are defined in the California Uniform Commercial Code ("UCC").

"ACH" means the Automated Clearing House electronic funds transfer system.

"Advance" means a Loan advanced by Lender to Borrower hereunder.

"Basic Rate" means a variable *per annum* rate of interest equal to the Index plus the Interest Margin which shall be subject to adjustment as provided in the Loan Agreement and/or the Note. On and after the Loan Commencement Date the Basic Rate shall be fixed and not subject to any further adjustments.

"Borrower's Books" means all of Borrower's books and records, including records concerning Collateral, Borrower's assets, liabilities, business operations or financial condition, on any media, and the equipment containing such information.

"Change of Management or Board Composition" means that **(i)** Borrower's senior management shall not include Gajus Worthington; **(ii)** Versant Ventures shall cease to have a representative (currently Samuel Colella) serving on Borrower's Board of Directors; or **(iii)** Lehman Brothers shall cease to have a representative (currently Hingge Hsu) serving on Borrower's Board of Directors;.

"Collateral" means: **(i)** all property listed on ***Exhibit A*** attached hereto; and **(ii)** all products and proceeds of the foregoing, including proceeds of insurance and proceeds of proceeds, *provided that*, notwithstanding anything to the contrary contained in this Agreement, the term Collateral shall not include (a) any property that is subject to a Lien that is otherwise permitted pursuant to subsection (v) of the definition of 'Permitted Liens" and Lender agrees to execute any instruments or documents necessary to evidence the intent of the foregoing; (b) more than 65% of the issued and outstanding voting securities of any Subsidiary of Borrower that is not incorporated or organized in the United States; or (c) any of the Company's Intellectual Property (as defined below).

"Commitment" means $13,000,000.

"Commitment Fee" means $10,000.

"Commitment Termination Date" means the earliest to occur of **(i)** the earlier to occur of (a) June 1, 2005, if Borrower has not borrowed at least $2,000,000 by such date; (b) September 1, 2005, if Borrower has not borrowed an additional $3,000,000 by such date or (c) December 1, 2005; **(ii)** any Default or Event of Default that has not been cured by Borrower or waived in writing by Lender, or **(iii)** Change of Management or Board Composition (unless Lender has waived this condition in writing).

"Control Agreement" means an agreement substantially in the form *of* ***Exhibit I*** or otherwise reasonably acceptable to Lender.

"Default" means any event that with the passing of time or the giving of notice or both would become an Event of Default.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

"*Default Rate*" means the lesser of 5% per annum above the otherwise applicable rate or the highest rate permitted by applicable law.

"*Disclosure Schedule*" means the Disclosure Schedule, dated as of the date hereof, and delivered to Lender in connection with the execution and delivery of this Agreement.

"*Event of Default*" is defined in **Section 8**.

"*Funding Date*" means any date on which an Advance is made to or on account of Borrower hereunder.

"*Indebtedness*" means **(i)** all indebtedness for borrowed money or the deferred purchase of property or services, **(ii)** all obligations evidenced by notes, bonds, debentures or similar instruments, **(iii)** all capital lease obligations, and **(iv)** all contingent obligations, consisting of guaranties of Indebtedness of other persons and obligations of reimbursement with respect to letters of credit.

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"*Incumbency Certificate*" means the document in the form *of* ***Exhibit E***.

"*Index*" means the prevailing variable Prime Rate of annual interest as quoted from time to time in the western edition of the Wall Street Journal.

"*Intellectual Property*" means, collectively, all rights, priorities and privileges of the Borrower relating to intellectual property, in any medium, of any kind or nature whatsoever, now or hereafter owned or acquired or received by Borrower, or in which Borrower now holds or hereafter acquires or receives any right or interest, whether arising under United States, multinational or foreign laws or otherwise, including, without limitation, any and all property of the Borrower that is subject to, listed in or otherwise described in the Negative Pledge Agreement dated March 29, 2005 between Borrower and Lender, and shall include, in any event, all copyrights, copyright licenses, patents, patent licenses, trademarks, trademark licenses, trade secrets, internet domain names (including any right related to the registration thereof), proprietary or confidential information, mask works, sources object or other programming codes, inventions (whether or not patented or patentable), technical information, procedures, designs, knowledge, know-how, software, data base, data, skill, expertise, recipe, experience, process, models, drawings, materials or records. Notwithstanding the foregoing, Intellectual Property as defined above does not include proceeds or other revenue consisting of accounts, accounts receivable, royalties, licensing fees, or payment intangibles, obtained or owed from or on account of the licensing or other exploitation or disposition of Intellectual Property, and all of which are included as Collateral in the security interest granted by Borrower to Lender.

"*Interest Margin*" means 2.5% per annum.

"*Lender's Expenses*" means all reasonable costs or expenses (including reasonable attorneys' fees and expenses) incurred in connection with the preparation, negotiation, modification, administration, or enforcement of the Loan or Loan Documents, or the exercise or preservation of any rights or remedies by Lender, whether or not suit is brought. Lender will apply deposits (including the Commitment Fee) received by Lender, if any, towards Lender's Expenses.

"*Lien*" means any lien, security interest, pledge, bailment, lease, mortgage, hypothecation, conditional sales and title retention agreement, charge, claim, or other encumbrance.

"*Liquidation Event*" means any of: **(i)** a merger of Borrower with another entity, other than a merger whereby the shareholders of Borrower immediately prior to such merger own at least 50% of the outstanding voting securities of Borrower immediately after such merger; **(ii)** the sale (in one or a series of related transactions) of all or substantially all of Borrower's assets; or **(iii)** any transaction (or series of related transactions) whereby the shareholders of Borrower immediately prior to such transaction(s) own less than 50% of the outstanding voting securities of Borrower immediately after such transaction(s).

"*Loan*" means all of the Advances, however evidenced, and all other amounts due or to become due hereunder.

"*Loan Commencement Date*" means March 1, 2006.

"*Loan Documents*" means, collectively, this Agreement, the Warrant, the Notes, the Financing Statement and Security Agreement in the form attached as ***Exhibit A*** and all other documents, instruments and agreements entered into between Borrower and Lender in connection with the Loan, all as amended or extended from time to time.

"*Negative Pledge Agreement*" means an agreement, dated as of the date hereof, in the form *of* ***Exhibit H***.

"*Note*" means each Secured Promissory Note in the form *of* ***Exhibit B,*** delivered in connection with each Advance.

"*Notice of Borrowing*" means the form attached as ***Exhibit D***.

"*Obligations*" means all Loans, debt, principal, interest, fees, charges, Lender's Expenses and other amounts, obligations, covenants, and duties owing by Borrower to Lender of any kind or description (whether pursuant to the Loan Documents or

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otherwise (with the exception of the Warrant), and whether or not for the payment of money), whether direct or indirect, absolute or contingent, due or to become due, now existing or hereafter arising, and including any of the same obtained by Lender by assignment or otherwise, and all amounts Borrower is required to pay or reimburse by the Loan Documents, by law, or otherwise.

"Permitted Indebtedness" means: **(i)** the Loan; **(ii)** unsecured trade debt incurred in the ordinary course of Borrower's business; **(iii)** Indebtedness secured by clause **(ii)** and **(v)** of Permitted Liens; **(iv)** Subordinated Indebtedness; **(v)** Indebtedness existing as of the date hereof and listed on the Disclosure Schedule; **(vi)** Indebtedness arising from the endorsement of negotiable instruments for deposits or collections or similar transactions in the ordinary course of business; **(vii)** other Indebtedness consisting of letters of credit and

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reimbursement obligations in an amount not to exceed $250,000; **(viii)** Indebtedness of (A) Borrower to any Subsidiary that is unsecured, (B) one Subsidiary to another Subsidiary, or (C) any Subsidiary to Borrower in an amount not to exceed $4,500,000 in the aggregate; **(ix)** other Indebtedness in an outstanding principal amount not to exceed $150,000 in the aggregate; and **(x)** Indebtedness incurred in connection with the extension, renewal or refinancing of any Indebtedness of the type described in clauses (i) through (ix) above, provided that the principal amount of such Indebtedness does not increase other than any reasonable premium in connection therewith. Notwithstanding the foregoing, the restrictions on Indebtedness for Subordinated Indebtedness and referenced in clause (v) of the definition of Permitted Liens shall cease at the effective date of a public offering of Borrower's capital stock which results in proceeds of at least $25,000,000.

"*Permitted Liens*" means: **(i)** Liens in favor of Lender; **(ii)** Liens disclosed in the Disclosure Schedule; **(iii)** Liens for taxes, fees, assessments or other governmental charges or levies not delinquent or being contested in good faith by appropriate proceedings, that do not jeopardize Lender's interest in any Collateral; **(iv)** Liens to secure payment of worker's compensation, employment insurance, old age pensions or other social security obligations of Borrower on which Borrower is current and are in the ordinary course of its business; provided none of the same diminish or impair Lender's rights and remedies respecting the Collateral; and **(v)** Liens upon or in any equipment (including any accessions, attachments, replacements, improvements or proceeds thereto) acquired or held by Borrower to secure the purchase price of such equipment or Indebtedness incurred solely for the purposes of financing such equipment, provided that the aggregate outstanding principal amount of all such financing shall not exceed $5,000,000, **(vi)** license or sublicenses of Intellectual Property granted in the ordinary course of business; **(vii)** banker's Liens, rights of setoff and similar Liens incurred on deposit and securities accounts in the ordinary course of business; **(viii)** Liens arising from judgments in circumstances not constituting and Event of Default; **(ix)** Liens in favor of customs and revenue authorities arising as a matter of law to secure payments of customs duties in connections with the importation of goods; **(x)** Liens on insurance proceeds in favor of insurance companies granted solely as security for financed premiums; **(xi)** carriers', warehousemen's, mechanics', landlords', materialmen's, repairmen's or other similar Liens arising in the ordinary course of business which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings; **(xii)** Liens with respect to cash collateral to secure Indebtedness otherwise permitted pursuant to clause (vii) of the definition of Permitted Indebtedness; and **(xiii)** Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clauses (i) through (xi) above, provided that any extension, renewal, or replacement Lien shall be limited to the collateral securing the existing Lien and the principal amount of such Indebtedness does not increase other than any reasonable premium in connection therewith.

"*Regulated Substance*" means any substance, material or waste the use, generation, handling, storage, treatment or disposal of which is regulated by any local or state government authority, including any of the same designated by any authority as hazardous, genetic, cloning, fetal, or embryonic.

"*Responsible Officer*" means each person as authorized by the board of directors of Borrower as set forth on the Incumbency Certificate.

"*Subordinated Indebtedness*" means Indebtedness of Borrower to Singapore EDB and Invus Group that is subordinated in both security and right of payment to the Obligations on terms and conditions reasonably satisfactory to Lender in an amount not to exceed $6,000,000.

"*Subsidiary*" shall mean any entity of which a majority of the outstanding equity interests entitled to vote for the election of directors is owned by Borrower.

"*Term*" means the period from and after the date hereof until the full, final and indefeasible payment and performance of all Obligations.

"*Warrant*" means the Warrant, dated as of the date hereof, in favor of Lender and its affiliates to purchase securities of Borrower substantially in the form *of* ***Exhibit C***.

1.2 Interpretation. References to "Articles," "Sections," "Exhibits," and "Schedules" are to articles, sections, exhibits and schedules herein and hereto unless otherwise indicated. "Hereof," "herein" and "hereunder" refer to this Agreement as a whole.

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"Including" is not limiting. All accounting and financial computations shall be computed in accordance with generally accepted accounting principles consistently applied *("GAAP").* "Or" is not necessarily exclusive. All interest computation interest shall be based on a 360-day year and actual days elapsed.

2. THE LOANS

2.1 Commitment. Subject to the terms hereof, Lender will make Advances to Borrower up to the principal amount of the Commitment, before the Commitment Termination Date. Notwithstanding anything in the Loan Documents to the contrary, Lender's obligation to make any Advances or to lend the undisbursed portion of the Commitment shall terminate on the Commitment Termination Date. Repaid principal of the Advances may not be re-borrowed.

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2.2 The Advances. A Note setting forth the specific terms of repayment will evidence each Advance. No Advance will be made for less than $1,000,000, unless less than $1,000,000 remains available under the Commitment for borrowing. Absence of a Note evidencing any portion of the Loan shall not impair Borrower's obligation to repay it to Lender.

2.3 Terms of Payment, Repayment.

(a) Repayment. Borrower shall repay the principal and pay interest on each Advance on the terms set forth in the applicable Note. Amounts not paid when due hereunder or under the Note shall bear interest at the Default Rate. If a court of competent jurisdiction determines that Lender has received payments that, if interest, would exceed the maximum lawfully permitted, Lender will instead apply such money to fees and expenses and then to early prepayment of principal (provided that notwithstanding anything contained in any Loan Document, any such prepayment shall not trigger any Prepayment Fees).

(b) ACH. All payments due to Lender must be, at Lender's option, paid to Lender in cash or through ACH. Borrower shall execute and deliver the ACH Authorization Form substantially in the form of ***Exhibit G.*** Lender shall provide Borrower an invoice for any Obligations that are to be transferred by ACH at least 10 days in advance of the date of any ACH funds transfer with respect to Obligations which have become due and payable and are to be transferred by ACH. If the ACH payment arrangement is terminated for any reason, Borrower shall make all payments due to Lender at Lender's address specified in **Section 11.**

(c) Default Rate. While an Event of Default has occurred and is continuing, interest on the Loan shall be increased to the Default Rate. Lender's failure to charge or accrue interest at the Default Rate during the existence of a Default shall not be deemed a waiver by Lender of its right or claim thereto.

(d) Date. Whenever any payment due under the Loan Documents is due on a day other than a business day, such payment shall be made on the next succeeding business day, and such extension of time shall be included in the computation of interest or fees, as the case may be.

2.4 Fees. Borrower shall pay to Lender the following:

(a) Commitment Fee. The Commitment Fee, which has been previously paid by Borrower, and shall be applied by Lender to Lender's Expenses and other Obligations;

(b) Late Fee. On demand, a late charge on any sums due hereunder that are not paid when due, in an amount equal to 2% of the past due amount, payable on demand.

(c) Lender's Expenses. The payment of all Lender's Expenses, which may become due to Lender by Borrower hereunder shall be payable by Borrower as set forth in **Section 2.3(b).** Lender's Expenses not paid when due shall bear interest as principal at the Default Rate.

3. CONDITIONS OF ADVANCES; PROCEDURE FOR REQUESTING ADVANCES

3.1 Conditions Precedent to any and all Advances. The obligation of Lender to make any Advances is subject to each and every of the following conditions precedent in form and substance satisfactory to Lender in its sole discretion: **(i)** this Agreement, a Note evidencing the Advance, the Warrant, and all other UCC financing statements, and other documents required or as specified herein have been duly authorized, executed and delivered; **(ii)** no Default or Event of Default has occurred and is continuing; **(iii)** delivery of a Notice of Borrowing with respect to the proposed Advance; **(iv)** Lender's security interests in the Collateral are valid and first priority, except for Permitted Liens; and **(v)** all such other items as Lender may reasonably deem necessary or appropriate have been delivered or satisfied. The extension of an Advance prior to the receipt by Lender of any of the foregoing shall not constitute a waiver by Lender of Borrower's obligation to deliver such item.

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3.2 Procedure for Making Advances. For any Advance, Borrower shall provide Lender an irrevocable Notice of Borrowing at least 7 business days prior to the desired Funding Date and Lender shall only be required to make Advances hereunder based upon written requests which comply with the terms and exhibits of this Loan Agreement (as the same may be amended from time to time), and which are submitted and signed by a Responsible Officer. Borrower shall execute and deliver to Lender a Note and such other documents and instruments as Lender may reasonably require for each Advance made.

4. CREATION OF SECURITY INTEREST

4.1 Grant of Security Interest. Borrower grants to Lender a valid, first priority, continuing security interest in all present and future Collateral in order to secure prompt, full, faithful and timely payment and performance of all Obligations.

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4.2 Inspections. Lender shall have the right upon reasonable prior notice to inspect Borrower's Books, including computer files, and to make copies, and to test, inspect and appraise the Collateral, in order to verify any matter relating to Borrower or the Collateral.

4.3 Authorization to File Financing Statements. Borrower irrevocably authorizes Lender at any time and from time to time to file in any jurisdiction any financing statements and amendments that: **(i)** name Collateral as collateral thereunder, regardless of whether any particular Collateral falls within the scope of the UCC; **(ii)** contain any other information required by the UCC for sufficiency or filing office acceptance, including organization identification numbers; and **(iii)** contain such language as Lender determines helpful in protecting or preserving rights against third parties. Borrower ratifies any such filings made prior to the date hereof.

5. REPRESENTATIONS AND WARRANTIES

Except as set forth on the Disclosure Schedule, Borrower represents and warrants as follows:

5.1 Due Organization and Qualification. Borrower is a corporation duly formed, existing and in good standing under the laws of its state of incorporation and qualified and licensed to do business in, and is in good standing in, any state in which the conduct of its business or its ownership of property requires that it be so qualified or in which the Collateral is located, except to the extent that such non-compliance would not reasonably be expected to result in an adverse effect on Borrower's business.

5.2 Authority. Borrower has all corporate power and authority, and has taken all actions, and has obtained all third party consents necessary to execute, deliver, and perform the Loan Documents.

5.3 Disclosure Schedule. All information on the Disclosure Schedule is true, correct and complete.

5.4 Authorization; Enforceability. The execution and delivery hereof, the granting of the security interest in the Collateral, the incurring of the Obligations, the execution and delivery of all Loan Documents and the consummation of the transactions herein and therein contemplated have been duly authorized by all necessary action by Borrower. The Loan Documents constitute legal, valid and binding obligations of Borrower, enforceable in accordance with their terms, except as enforceability may be limited by bankruptcy or similar laws relating to enforcement of creditors' rights generally.

5.5 Name and Location. Borrower has not done business under any name other than that specified on the signature page hereof. The chief executive office, principal place of business, and the place where Borrower maintains its records concerning the Collateral is set forth in **Section 11.** The Collateral is presently located at the address(es) set forth in **Section 11** and on the Disclosure Schedule or any other location that Borrower has provided Lender with written notice thereof.

5.6 Litigation. All actions or proceedings pending by or against Borrower that could reasonably be expected to result in a material adverse effect on Borrower's business before any court or administrative agency are set forth on the Disclosure Schedule.

5.7 Financial Statements. All financial statements delivered by Borrower to Lender present fairly in all material respects Borrower's financial condition for the periods indicated. All statements respecting Collateral that have been or may hereafter be delivered by Borrower to Lender are true, complete and correct in all material respects for the periods indicated.

5.8 Solvency. Borrower is solvent and able to pay its debts (including trade debts) as they come due.

5.9 Taxes. Borrower has filed and will file all required tax returns, and has paid and will pay all taxes it owes other than where the failure to comply would not reasonably be expected to have a material adverse effect on Borrower.

5.10 Rights; Title to Assets. To Borrower's knowledge, Borrower possesses, owns, or has the right to use all necessary assets, rights, trademarks, trade names, copyrights, patents, patent rights, franchises and licenses which are required to conduct of its

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business as now operated, except where the failure to possess or own could not reasonably be expected to have a material adverse effect on Borrower's business. Borrower has good title to its assets, free and clear of any Liens, except for Permitted Liens.

5.11 Full Disclosure. No written representation, warranty or other statement made by Borrower in any Loan Document, certificate or statement furnished to Lender contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained in such certificates or statements not misleading (it being recognized by Lender that projections and estimates as to future events are not to be viewed as facts and the actual results during the period or periods covered by any such projections and estimates may differ from projected or estimated results).

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5.12 Regulated Substances. Borrower complies and will comply with all laws respecting Regulated Substances, except where the failure to comply could not reasonably be expected to have an adverse effect on Borrower's business.

5.13 Reaffirmation. Each Notice of Borrowing will constitute **(i)** a warranty and representation in favor of Lender that there does not exist any Default and **(ii)** subject to any amended Disclosure Schedule delivered to Lender or any other written disclosure required to be sent to Lender pursuant to the terms hereof, a reaffirmation as of the date thereof of all of the representations and warranties contained in this Agreement and the Loan Documents.

6. AFFIRMATIVE COVENANTS

So long as any Obligations (other than inchoate indemnity obligations) remain outstanding, Borrower covenants and agrees that it shall do all of the following:

6.1 Good Standing and Compliance. Borrower shall maintain all governmental licenses, rights and agreements necessary for its operations or business and comply in all respects with all statutes, laws, ordinances and government rules and regulations to which it is subject except where the failure to comply would not reasonably be expected to result in a material adverse effect on Borrower.

6.2 Financial Statements, Reports, Certificates. Borrower shall deliver to Lender: **(i)** as soon as prepared, and no later than 30 days after the end of each calendar month, a balance sheet, income statement and cash flow statement covering Borrower's operations during such period; **(ii)** as soon as prepared, but no later than 90 days after the end of the fiscal year, or such other timeframe formally approved by Borrower's audit committee, audited financial statements prepared in accordance with GAAP, together with an opinion that such financial statements fairly present Borrower's financial condition by an independent public accounting firm reasonably acceptable to Lender; **(iii)** immediately upon notice thereof, a report of any legal or administrative action pending or threatened in writing against Borrower which is likely to result in liability to Borrower in excess of $100,000 (provided that Borrower shall not be required to report notices of possibly relevant third party patents, or proposals or demands to license intellectual property); and **(iv)** such other financial information as Lender may reasonably request from time to time. Financial statements delivered pursuant to subsections **(i)** and **(ii)** above shall be accompanied by a certificate signed by a Responsible Officer (each an *"Officer's Certificate")* in the form ***of Exhibit F.***

6.3 Notice of Defaults. Upon any Default or Event of Default, an Officer's Certificate setting forth the facts relating to or giving rise thereto, and the Borrower's proposed action with respect thereto.

6.4 Use; Maintenance. Borrower, at its expense, shall **(i)** maintain the tangible Collateral in good condition, reasonable wear and tear excepted, and will comply in all material respects with all laws, rules and regulations regarding use and operation of the tangible Collateral and **(ii)** repair or replace any lost or damaged Collateral except to the extent that Borrower in its good faith judgment deems it to be in its best interest not to repair or replace such lost or damaged Collateral, so long as applied to a purchase or acquisition useful to Borrower's business.

6.5 Insurance. Borrower, at its own expense, shall maintain insurance in amounts and coverages reasonably satisfactory to Lender. Each insurance shall: **(i)** name Lender loss payee or additional insured, as appropriate, **(ii)** provide for insurer's waiver of its right of subrogation against Lender and Borrower, **(iii)** provide that such insurance shall not be invalidated by any action of, or breach of warranty by, Borrower and waive set-off, counterclaim or offset against Lender, **(iv)** be primary without a right of contribution of Lender's insurance, if any, or any obligation on the part of Lender to pay premiums of Borrower, and **(v)** require the insurer to give Lender at least 30 days prior written notice of cancellation. Borrower shall furnish all certificates of insurance required by Lender.

6.6 Loss Proceeds. So long as no Event of Default has occurred and is continuing, any proceeds of insurance on or condemnation of Collateral shall, at Borrower's election and so long as Lender's security interest in such proceeds remains first priority, be used either to repair or replace such Collateral or otherwise applied to the purchase or acquisition of property useful to Borrower's business.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

6.7 Further Assurances. At any time and from time to time, Borrower shall execute and deliver such further instruments and take such further action as Lender may reasonably request to effect the intent and purposes hereof, to perfect and continue perfected and of first priority Lender's security interests in the Collateral, and to effect and maintain ACH payment arrangements.

7. NEGATIVE COVENANTS

So long as any Obligations (other than inchoate indemnity obligations) remain outstanding, Borrower will not do any of the following:

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7.1 Location of Collateral. Change its chief executive office or principal place of business or remove, except in the ordinary course of Borrower's business, the Collateral or Borrower's Books from the premises listed in **Section 11** and the Disclosure Schedule (or otherwise provided to Lender in writing pursuant to this **Section 7.1**) without giving 30 days prior written notice to Lender. Borrower's practice of delivering and maintaining inventory at a customer's location pending testing, validation and/or acceptance of such inventory by such customer shall be deemed to be in the "ordinary course of business" for purposes of this Agreement.

7.2 Extraordinary Transactions. Enter into any transaction not in the ordinary course of Borrower's business, including the sale, lease, license or other disposition of its assets, other than **(i)** sales of inventory in the ordinary course of Borrower's business; and **(ii)** licenses of intellectual property assets entered into in the ordinary course of business (provided that licensing arrangements involving universities, governmental agencies, research institutions and corporate partners shall be deemed in the "ordinary course of business"). The parties hereto agree (a) strategic partnerships, strategic collaborations, sponsored research collaborations and development transactions, (b) transactions otherwise permitted in this **Article 7,** and (c) transactions for fair value involving the sale or exclusive licensing of Intellectual Property, that is outside the scope of Borrower's business in the biotechnology field, that is not being commercialized or monetized by the Borrower; in each case, shall be deemed to be in the "ordinary course of business" for purposes of this Agreement.

7.3 Restructure. Make any material change in Borrower's corporate structure or business other than the business of the type conducted by Borrower as of the date of this Agreement or any business reasonably related or incidental thereto; or suspend operation of Borrower's business.

7.4 Liens. Create, incur, assume or suffer to exist any Lien of any kind with respect to any of its property, whether now owned or hereafter acquired, except for Permitted Liens.

7.5 Indebtedness. Create, incur, assume or suffer to exist any Indebtedness, other than Permitted Indebtedness or cause or suffer any Subsidiary to create, incur, assume or suffer to exist any Indebtedness, other than Permitted Indebtedness.

7.6 Distributions. Pay any dividends or distributions, or redeem or purchase, any capital stock, except for **(i)** repurchases of capital stock from employees, consultants or directors, under incentive stock option plans, restricted stock purchase agreements, repurchase agreements or other similar agreements approved by the Borrower's Board of Directors and **(ii)** dividends payable solely in capital stock.

7.7 Transactions with Affiliates. Directly or indirectly enter into any transaction with any affiliate which is on terms less favorable to Borrower than would be obtained in an arm's length transaction with a non-affiliated entity; *provided*, any such transaction shall not be a breach of this Section 7.7 if **(i)** approved by a disinterested majority of the Borrower's Board of Directors, or **(ii)** such transaction involves sales, licensing or other transfers of property between Borrower and its Subsidiaries, or between Subsidiaries if the consideration for such sale or transfer is not less than cost (or the fair market value of such property, if lower), or **(iii)** such transaction involves intercompany loans that are otherwise permitted by **Section 7.5.**

7.8 Compliance. (i) Become regulated as an "investment company" under the Investment Company Act of 1940 or extend credit to purchase or carry margin stock; **(ii)** fail to meet the minimum funding requirements of ERISA; **(iii)** permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur; **(iv)** fail to comply with the Federal Fair Labor Standards Act; or **(v)** violate any other material law or material regulation.

7.9 UCC Effectiveness. Change its name, jurisdiction of organization, or take any other action that could render Lender's financing statements misleading under the Code, without giving Lender 30 days advance written notice.

7.10 Deposit and Securities Accounts. Maintain any deposit accounts or accounts holding securities owned by Borrower except accounts in which Lender has obtained a perfected first priority security interest with the exception of **(i)** account number [***] with Silicon Valley Bank or a successor account with Wells Fargo Bank securing a letter of credit in favor of Borrower's landlord in an amount not to exceed $250,000 in principal amount; **(ii)** account number [***] with Comerica Bank or a successor account with Wells Fargo Bank securing a letter of credit in favor of a lender providing equipment financing to Borrower in an amount not

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to exceed $500,000 in principal amount; or **(iii)** account number [***] with Wells Fargo Bank securing a letter of credit in favor of Borrower's landlord in an amount not to exceed $137,527 in principal amount; or **(iv)** any other accounts at Silicon Valley Bank or Comerica Bank (other than those specified in clause (i) or (ii) of this **Section 7.10,** provided that such accounts are closed and such funds are move to deposit or securities accounts in which Lender has a perfect first priority security interest, on or before June 30, 2005.

8. EVENTS OF DEFAULT

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Any one or more of the following shall constitute an Event of Default by Borrower hereunder:

8.1 Payment. Borrower fails to pay when due and payable in accordance with the Loan Documents any portion of the Obligations, or cancels an ACH payment or transfer Lender has initiated in conformity with the terms hereof *provided, however,* that an Event of Default shall not occur on account of a failure to pay due solely to an administrative or operational error if Borrower had the funds to make the payment when due and makes the payment the business day following Borrower's knowledge of such failure to pay.

8.2 Certain Covenant Defaults. Borrower fails to perform any obligation under **Section 6.5** or **6.6**, or violates any of the covenants contained in **Section 7.**

8.3 Other Covenant Defaults. Borrower fails or neglects to perform, keep, or observe any other term, provision, condition, covenant, or agreement contained in this Agreement, in any of the other Loan Documents, or in any other present or future agreement between Borrower and Lender and has failed to cure such failure within 30 days after its occurrence.

8.4 Attachment. Any material portion of Borrower's assets is attached, seized, subjected to a government levy, lien, writ or distress warrant, or comes into the possession of any trustee or receiver and the same is not returned, removed, waived, stayed, discharged or rescinded within 15 days.

8.5 Other Agreements. There is a default in any agreement to which Borrower is a party resulting in a right by a third party, whether or not exercised, to accelerate the maturity of any Indebtedness, in an amount greater than $ 100,000.

8.6 Judgments. One or more judgments for an aggregate of at least $100,000 is rendered against Borrower and remains unsatisfied and unstayed for more than 30 days.

8.7 Injunction. Borrower is enjoined, restrained, or in any way prevented by court order from continuing to conduct any material part of its business affairs, or if a judgment or other claim becomes a Lien upon any material portion of Borrower's assets.

8.8 Misrepresentation. Any representation, statement, or report made to Lender by Borrower was false or misleading when made in any material respect.

8.9 Enforceability. Lender's ability to enforce its rights against Borrower or any Collateral is impaired in any material respect, or Borrower asserts that any Loan Document is not a legal, valid and binding obligation of Borrower enforceable in accordance with its terms.

8.10 Involuntary Bankruptcy. An involuntary bankruptcy case remains undismissed or unstayed for 60 days or, if earlier, an order granting the relief sought is entered.

8.11 Voluntary Bankruptcy or Insolvency. Borrower commences a voluntary case under applicable bankruptcy or insolvency law, consents to the entry of an order for relief in an involuntary case under any such law, or consents or is subject to the appointment of or taking possession by a receiver, liquidator, assignee, trustee, custodian or other similar official of Borrower or any substantial part of its property, or makes an assignment for the benefit of creditors, or fails generally or admits in writing to its inability to pay its debts as they become due, or takes any corporate action in furtherance of any of the foregoing.

8.12 Merger without Assumption. Borrower or all or substantially all of Borrower's assets are acquired by or merged into any other business entity where more than 50% of Borrower's voting power is transferred by existing shareholders of Borrower, and such acquirer or resulting entity either: **(i)** does not pay off the Obligations at the closing of the acquisition, merger or sale; or **(ii)** does not provide an unconditional, unlimited guaranty of the Obligations in form and substance satisfactory to Lender and is of a credit quality unacceptable to Lender.

8.13 Liquidation Event. Borrower consummates a Liquidation Event where the acquirer or resulting entity either: **(i)** does not

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pay off the Obligations at the closing of the acquisition, merger or sale; or **(ii)** does not provide an unconditional, unlimited guaranty of the Obligations in form and substance satisfactory to Lender and is of a credit quality unacceptable to Lender.

8.14 General Electric Capital Corporation Indebtedness. The outstanding principal balance of Borrower owed to General Electric Capital Corporation in connection with any equipment financing shall be greater than $2,500,000 at any time after December 31, 2006.

9. LENDER'S RIGHTS AND REMEDIES

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

9.1 Rights and Remedies. Upon the occurrence and continuance of any Event of Default, Lender may, at its election, without notice of election and without demand, do any one or more of the following, all of which are authorized by Borrower: **(i)** accelerate and declare the Loan and all Obligations immediately due and payable; **(ii)** make such payments and do such acts as Lender considers necessary or reasonable to protect its security interest in the Collateral, with such amounts becoming Obligations bearing interest at the Default Rate; **(iii)** exercise any and all other rights and remedies available under the UCC or otherwise; **(iv)** require Borrower to assemble the Collateral at such places as Lender may designate; **(v)** enter premises where any Collateral is located, take, maintain possession of, or render unusable the Collateral or any part of it; **(vi)** without notice to Borrower, set off and recoup against any portion of the Obligations; **(vii)** ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral, in connection with which Borrower hereby grants Lender a license to use without charge Borrower's premises, labels, name, trademarks, and other property necessary to complete, advertise, and sell any Collateral; and **(viii)** sell the Collateral at one or more public or private sales.

9.2 Power of Attorney in Respect of the Collateral. Borrower hereby irrevocably appoints Lender (which appointment is coupled with an interest) its true and lawful attorney in fact with full power of substitution, for it and in its name to, during the existence of an Event of Default: **(i)** ask, demand, collect, receive, sue for, compound and give acquittance for any and all Collateral with full power to settle, adjust or compromise any claim, **(ii)** receive payment of and endorse the name of Borrower on any items of Collateral, **(iii)** make all demands, consents and waivers, or take any other action with respect to, the Collateral, **(iv)** file any claim or take any other action, in Lender's or Borrower's name, which Lender may reasonably deem appropriate to protect its rights in the Collateral, or **(v)** otherwise act with respect to the Collateral as though Lender were its outright owner.

9.3 Charges. If Borrower fails to pay any amounts required hereunder to be paid by Borrower to any third party, Lender may at its option pay any part thereof and any amounts so paid including Lender's Expenses incurred shall become Obligations, immediately due and payable, bearing interest at the Default Rate, and secured by the Collateral. Any such payments by Lender shall not constitute an agreement to make similar payments or a waiver of any Event of Default.

9.4 Remedies Cumulative. Lender's rights and remedies under the Loan Documents and all other agreements with Borrower shall be cumulative. Lender shall have all other rights and remedies as provided under the UCC, by law, or in equity. No exercise by Lender of one right or remedy shall be deemed an election, and no waiver by Lender of any Event of Default shall be deemed a continuing waiver. No delay by Lender shall constitute a waiver, election, or acquiescence.

9.5 Application of Collateral Proceeds. Lender will apply proceeds of sale, to the extent actually received in cash, in the manner and order it determines in its sole discretion, and as prescribed by applicable law.

10. WAIVERS; INDEMNIFICATION

10.1 Waivers. Without limiting the generality of the other waivers made by Borrower herein, to the maximum extent permitted under applicable law, Borrower hereby irrevocably waives all of the following: **(i)** any right to assert *against Lender* as a defense, counterclaim, set-off or crossclaim, any defense (legal or equitable), set-off, counterclaim, crossclaim and/or other claim (a) which Borrower may now or at any time hereafter have against any party liable to Lender in any way or manner, or (b) arising directly or indirectly from the present or future lack of perfection, sufficiency, validity and/or enforceability of any Loan Document, or any security interest; **(ii)** notice of presentment, dishonor, notice of intent to accelerate, protest, default, nonpayment, maturity; **(iii)** the benefit of all marshalling, valuation, appraisal and exemption laws; **(iv)** the right, if any, to require Lender to (a) proceed against any person liable for any of the Obligations as a condition to or before proceeding hereunder; or (b) foreclose upon, sell or otherwise realize upon or collect or apply any other property, real or personal, securing any of the Obligations, as a condition to, or before proceeding hereunder; **(v)** any demand for possession before the commencement of any suit or action to recover possession of Collateral; and **(vi)** any requirement that Lender retain possession and not dispose of Collateral until after trial or final judgment.

10.2 Lender's Liability for Collateral. Lender shall not in any way or manner be liable or responsible for: **(i)** the safekeeping of any Collateral (except to the extent mandated by the UCC); **(ii)** any loss or damage thereto occurring or arising in any manner or fashion from any cause; **(iii)** any diminution in the value thereof; or **(iv)** any act or default of any carrier, warehouseman, bailee, forwarding agency, or other person or entity whomsoever. All risk of loss, damage or destruction of the Collateral shall be borne

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by Borrower. Lender will have no responsibility for taking any steps to preserve rights against any parties respecting any Collateral. Lender's powers hereunder are conferred solely to protect its interest in the Collateral and do not impose any duty to exercise any such powers. None of Lender or any of its officers, directors, employees, agents or counsel will be liable for any action lawfully taken or omitted to be taken hereunder or in connection herewith (excepting gross negligence or willful misconduct), nor under any circumstances have any liability to Borrower for lost profits or other special, indirect, punitive, or consequential damages. Lender retains any documents delivered by Borrower only for its purposes and for such period as Lender, at its sole discretion, may determine necessary, after which time Lender may destroy such records without notice to or consent from Borrower.

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10.3 Indemnification. Borrower shall, on an after tax basis, defend, indemnify, and hold Lender and each of its officers, directors, employees, counsel, partners, agents and attorneys-in-fact (each, an *"Indemnified Person")* harmless from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, charges, expenses or disbursements (including Lender's Expenses and reasonable attorney's fees and the allocated cost of in-house counsel) of any kind or nature whatsoever with respect to the execution, delivery, enforcement, performance and administration of this Agreement and any other Loan Documents, or the transactions contemplated hereby and thereby, with respect to noncompliance with laws or regulations respecting Regulated Substances, government secrecy or technology export, or any Lien not created by Lender or right of another against any Collateral, even if the Collateral is foreclosed upon or sold pursuant hereto, and with respect to any investigation, litigation or proceeding before any agency, court or other governmental authority relating to this Agreement or the Advances or the use of the proceeds thereof, whether or not any Indemnified Person is a party thereto (all the foregoing, collectively, the *"Indemnified Liabilities"); provided*, that Borrower shall have no obligation hereunder to any Indemnified Person with respect to Indemnified Liabilities arising from the gross negligence or willful misconduct of such Indemnified Person. The obligations in this Section shall survive the Term. At the election of any Indemnified Person, Borrower shall defend such Indemnified Person using legal counsel satisfactory to such Indemnified Person, at the sole cost and expense of Borrower. All amounts owing under this Section shall be paid within 30 days after written demand.

11. NOTICES

All notices shall be in writing and personally delivered or sent by certified mail, postage prepaid, return receipt requested, or by confirmed facsimile, at the respective addresses set forth below:

If to Borrower:

Fluidigm Corporation
7100 Shoreline Court
South San Francisco, California 94080
Attention: General Counsel,
Director of Finance
FAX: (650)871-7152

If to Lender:

Lighthouse Capital Partners V, LP
500 Drake's Landing Road
Greenbrae, California 94904
Attention: Contract Administrator

FAX: (415)925-3387

12. GENERAL PROVISIONS

12.1 Successors and Assigns. This Agreement shall bind and inure to the benefit of the parties' respective successors and permitted assigns. Borrower may not assign any rights hereunder without Lender's prior written consent, which consent may be granted or withheld in Lender's sole discretion. Lender shall have the right without the consent of or notice to Borrower to sell, transfer, negotiate, or grant participations in all or any part of any Loan Document, *provided* that Lender shall not sell, transfer, negotiate, or grant participations in all or any part of any Loan Document to any competitor of Borrower.

12.2 Time of Essence. Time is of the essence for the performance of all Obligations.

12.3 Severability of Provisions. Each provision hereof shall be severable from every other provision in determining its legal enforceability.

12.4 Entire Agreement. This Agreement and each of the other Loan Documents dated as of the date hereof, taken together, constitute and contain the entire agreement between Borrower and Lender with respect to their subject matter and supersede any and all prior agreements, negotiations, correspondence, understandings and communications between the parties, whether written or oral. This Agreement is the result of negotiations between and has been reviewed by the Borrower and Lender as of the date hereof and their respective counsel; *accordingly*, this Agreement shall be deemed to be the product of the parties hereto, and no ambiguity shall be construed in favor of or against Borrower or Lender. This Agreement may only be modified with the written consent of Lender. Any waiver or consent with respect to any provision of the Loan Documents shall be effective only in the

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specific instance and for the specific purpose for which it was given. No notice to or demand on Borrower in any one case shall entitle Borrower to any other or further notice or demand in similar or other circumstances.

12.5 Reliance by Lender. All covenants, agreements, representations and warranties made herein by Borrower shall, notwithstanding any investigation by Lender, be deemed to be material to and to have been relied upon by Lender.

12.6 No Set-Offs by Borrower. All sums payable by Borrower pursuant to this Agreement or any of the other Loan Documents shall be payable without notice or demand and shall be payable in United States Dollars without set-off or reduction of any manner whatsoever.

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12.7 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, and all of which, when taken together, shall constitute one and the same original instrument.

12.8 Survival. All covenants, representations and warranties made in this Agreement shall continue in full force and effect so long as any Obligations (other than inchoate indemnity obligations) remain outstanding.

12.9 No Original Issue Discount. Borrower and Lender acknowledge and agree that the Warrant is part of an investment unit within the meaning of Section 1273(c)(2) of the Internal Revenue Code, which includes the Loan. Borrower and Lender further agree as between them, that the fair market value of the Warrant is $100 and that, pursuant to Treas. Reg. § 1.1273-2(h), $100 of the issue price of the investment unit will be allocable to the Warrant and the balance shall be allocable to the Loans. Borrower and Lender agree to prepare their federal income tax returns in a manner consistent with the foregoing and, pursuant to Treas. Reg. § 1.1273, the original issue discount on the Loan shall be considered to be zero.

12.10 Relationship of Parties. The relationship between Borrower and Lender is, and at all times shall remain, solely that of a borrower and lender. Lender is not a partner or joint venturer of Borrower; nor shall Lender under any circumstances be deemed to be in a relationship of confidence or trust or have a fiduciary relationship with Borrower or any of its affiliates, or to owe any fiduciary duty to Borrower or any of its affiliates. Lender does not undertake or assume any responsibility or duty to Borrower or any of its affiliates to select, review, inspect, supervise, pass judgment upon or otherwise inform any of them of any matter in connection with its or their property, the Loans, any Collateral or the operations of Borrower or any of its affiliates. Borrower and each of its affiliates shall rely entirely on their own judgment with respect to such matters, and any review, inspection, supervision, exercise of judgment or supply of information undertaken or assumed by Lender in connection with such matters is solely for the protection of Lender and neither Borrower nor any affiliate is entitled to rely thereon.

12.11 Choice of Law and Venue; Jury Trial Waiver. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. EACH OF BORROWER AND LENDER HEREBY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE CITY AND COUNTY OF SAN FRANCISCO, STATE OF CALIFORNIA. BORROWER AND LENDER HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF ANY OF THE LOAN DOCUMENTS OR ANY OF THE TRANSACTIONS CONTEMPLATED THEREIN, INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS. EACH PARTY FURTHER WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION IN WHICH A JURY TRIAL HAS BEEN WAIVED WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED.

12.12 Termination. Upon the full, faithful and indefeasible payment and performance of all Obligations(other than inchoate indemnity obligations) and the termination of any commitment to extend credit under this Agreement, the security interest granted herein and under the other Loan Documents shall terminate and this Agreement and the other Loan Documents (other than the Warrant) shall terminate, except for any inchoate indemnity obligations under **Section 10.3** of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

FLUIDIGM CORPORATION		**LIGHTHOUSE CAPITAL PARTNERS V, L.P.**	
		By:	**LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,** its general partner
By:	/s/ Gajus Worthington	By:	/s/ Thomas Conneely
Name:	Gajus Worthington	Name:	Thomas Conneely
Title:	PRESIDENT & CEO	Title:	Vice President

Exhibit A Collateral Description

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit B	Form of Note
Exhibit C	Form of Preferred Stock Warrant
Exhibit D	Form of Notice of Borrowing
Exhibit E	Form of Incumbency Certificate
Exhibit F	Form of Officers Certificate
Exhibit G	ACH Authorization
Exhibit H	Form of Negative Pledge Agreement
Exhibit I	Control Agreement

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EXHIBIT A

COLLATERAL

This FINANCING STATEMENT and SECURITY AGREEMENT covers all of Debtor's interests in all of the following types or items of property described on this **Exhibit A** (collectively, the *"Collateral")*, wherever located and whether now owned or hereafter acquired, and Debtor hereby grants Secured Party a security interest therein as collateral for the payment and performance of all present and future indebtedness, liabilities, guarantees and obligations of Debtor to Secured Party, howsoever arising. Debtor agrees that said security interest may be enforced by Secured Party in accordance with the terms of all security and other agreements between Secured Party and Debtor, the California Uniform Commercial Code, or both, and that this document shall be fully effective as a security agreement, even if there is no other security or other agreement between Secured Party or Debtor:

All assets of the Debtor; all personal property of Debtor;

All "accounts", "general intangibles", "chattel paper", "contract rights", "documents", "instruments", "deposit accounts", "inventory", "farm products", "fixtures" and "equipment", as such terms are defined in Division 9 of the California Uniform Commercial Code in effect on the date hereof;

All general intangibles of every kind, including without limitation, federal, state and local tax refunds and claims of all kinds; all rights as a licensee or any kind; all customer lists, telephone numbers, and purchase orders, and all rights to purchase, lease sell, or otherwise acquire or deal with real or personal property and all rights relating thereto;

All returned and repossessed goods and all rights as a seller of goods; all collateral securing any of the foregoing; all deposit accounts, special and general, whether on deposit with Secured Party or others;

All life and other insurance policies, claims in contract, tort or otherwise, and all judgments now or hereafter arising therefrom;

All right, title and interest of Debtor, and all of Debtor's rights, remedies, security and liens, in, to and in respect of all accounts and other collateral, including, without limitation, rights of stoppage in transit, replevin, repossession and reclamation and other rights and remedies of an unpaid vendor, lienor or secured party, and all guarantees and other contracts of suretyship with respect to any accounts and other collateral, and all deposits and other security for any accounts and other collateral, and all credit and other insurance;

All notes, drafts, letters of credit, contract rights, and things in action; all drawings, specifications, blueprints and catalogs; and all raw materials, work in process, materials used or consumed in Debtor's business, goods, finished goods, returned goods and all other goods and inventory of whatsoever land or nature, any and all wrapping, packaging, advertising and shipping materials, and all documents relating thereto, and all labels and other devices, names and marks affixed or to be affixed thereto for purposes of selling or identifying the same or the seller or manufacturer thereof;

All inventory wherever located; all present and future claims against any supplier of any of the foregoing, including claims for defective goods or overpayments to or undershipments by suppliers; all proceeds arising from the lease or rental of any of the foregoing;

All equipment and fixtures, including without limitation all machinery, machine tools, motors, controls, parts, vehicles, workstations, tools, dies, jigs, furniture, furnishings and fixtures; and all attachments, accessories, accessions and property now or hereafter affixed to or used in connection with any of the foregoing, and all substitutions and replacements for any of the foregoing; all warranty and other claims against any vendor or lessor of any of the foregoing;

All investment property;

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All books, records, ledger cards, computer data and programs and other property and general intangibles at any time evidencing or relating to any or all of the foregoing; and

All cash and non-cash products and proceeds of any of the foregoing, in whatever form, including proceeds in the form of inventory, equipment or any other form of personal property, including proceeds of proceeds and proceeds of insurance, and all claims by Debtor against third parties for loss or damage to, or destruction of, or otherwise relating to, any or all of the foregoing.

NOTICE — PURSUANT TO AN AGREEMENT BETWEEN DEBTOR AND SECURED PARTY, DEBTOR HAS AGREED NOT TO FURTHER ENCUMBER THE COLLATERAL DESCRIBED HEREIN (EXCEPT AS EXPRESSLY PERMITTED PURSUANT TO SUCH AGREEMENT), THE FURTHER ENCUMBERING OF WHICH MAY CONSTITUTE THE TORTIOUS INTERFERENCE

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WITH SECURED PARTY'S RIGHTS BY SUCH ENCUMBRANCER. IN THE EVENT THAT ANY ENTITY IS GRANTED A SECURITY INTEREST IN DEBTOR'S ACCOUNTS, CHATTEL PAPER, GENERAL INTANGIBLES OR OTHER ASSETS CONTRARY TO THE ABOVE, THE SECURED PARTY ASSERTS A CLAIM TO ANY PROCEEDS THEREOF RECEIVED BY SUCH ENTITY.

Notwithstanding any of the foregoing, this Financing Statement and Security Agreement does not cover any of Debtor's interests in, and the Collateral shall not under any circumstance include, and no security interest is granted in, (i) any property that is subject to a Lien that is otherwise permitted pursuant to subsection (v) of the definition of "Permitted Liens" as defined in that certain Loan and Security Agreement, dated as of March 29, 2005, by and between Secured Party and Debtor, and Secured Party agrees to execute any instruments or documents necessary to evidence the intent of the foregoing, (ii) more than 65% of the issued and outstanding voting securities of any subsidiary of Debtor that is not incorporated or organized in the United States, or (iii) Debtor's Intellectual Property, including, without limitation, any and all property of the Debtor that is subject to, listed in or otherwise described in the Negative Pledge Agreement dated March 29, 2005 between the Secured Party and the Debtor. *"Intellectual Property"* means, collectively, all rights, priorities and privileges of the Debtor relating to intellectual property, in any medium, of any kind or nature whatsoever, now or hereafter owned or acquired or received by Debtor, or in which Debtor now holds or hereafter acquires or receives any right or interest, whether arising under United States, multinational or foreign laws or otherwise, and shall include, in any event, all copyrights, copyright licenses, patents, patent licenses, trademarks, trademark licenses, trade secrets, internet domain names (including any right related to the registration thereof), proprietary or confidential information, mask works, sources object or other programming codes, inventions (whether or not patented or patentable), technical information, procedures, designs, knowledge, know-how, software, data base, data, skill, expertise, recipe, experience, process, models, drawings, materials or records. Notwithstanding the foregoing, Intellectual Property as defined above does not include proceeds or other revenue consisting of accounts, accounts receivable, royalties, licensing fees, or payment intangibles obtained or owed from or on account of the licensing or other exploitation or disposition of Intellectual Property, none of which are excluded, and all of which are included as collateral in the security interest granted by Debtor to Secured Party.

"DEBTOR"	**"SECURED PARTY"**
FLUIDIGM CORPORATION, a California corporation	**LIGHTHOUSE CAPITAL PARTNERS V, L.P.** **BY: LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,** its general partner
By:	
Name:	By: _____
Title:	Name: _____
	Title:

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT B

[_____]

SECURED PROMISSORY NOTE

This SECURED PROMISSORY NOTE (this "*Note*") is made _____, 200__, by **FLUIDIGM CORPORATION (** "*Borrower*") in favor of **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** (collectively with its assigns, "*Lender*"). Initially capitalized terms used and not otherwise defined herein are defined in that certain Loan and Security Agreement No. 4561 between Borrower and Lender dated March 29, 2005 (the "*Loan Agreement*").

FOR VALUE RECEIVED, Borrower promises to pay in lawful money of the United States, to the order of Lender, at 500 Drake's Landing Road, Greenbrae, California 94904, or such other place as Lender may from time to time designate *("Lender's Office"),* the principal sum of $_____ (the "Advance"), including interest on the unpaid balance and all other amounts due or to become due hereunder according to the terms hereof and of the Loan Agreement.

"Basic Rate" means a variable *per annum* rate of interest equal to the Index plus the Interest Margin which shall be subject to adjustment as provided herein. On and after the Loan Commencement Date the Basic Rate shall be fixed and not subject to any further adjustments.

"Final Payment" means 9% of the Advance.

"Index" means the prevailing variable Prime Rate of annual interest as quoted from time to time in the western edition of the Wall Street Journal.

"Interest Margin" means 2.5% per annum.

"Loan Commencement Date" means March 1, 2006.

"Maturity Date" means the last day of the Repayment Period, or if earlier, the date of prepayment under the Note.

"Payment Date" means the first day of each calendar month.

"Prepayment Fee" means (i) if prepaid in the calendar year 2006, 3% of the outstanding principal amount being prepaid; (ii) if prepaid in the calendar year 2007, 2% of the outstanding principal amount being prepaid; and (iii) if prepaid in the calendar year 2008 or 2009, 1% of the outstanding principal amount being prepaid.

"Repayment Period" means the period beginning on the Loan Commencement Date and continuing for 36 calendar months.

1. Repayment. Borrower shall pay principal and interest due hereunder from the Funding Date, until this Note is paid in full, on each Payment Date pursuant to the terms of the Loan Agreement and this Note. Prior to the Loan Commencement Date, Borrower shall pay to Lender, monthly in advance on each Payment Date, interest calculated using the Basic Rate prevailing on the first business day of such calendar month. Beginning on the Loan Commencement Date and on each Payment Date thereafter during the Repayment Period, Borrower shall make equal installments of principal and interest in advance, calculated at the Basic Rate. On the Maturity Date, Borrower shall pay, in addition to all unpaid principal and interest outstanding hereunder, the Final Payment.

2. Interest. Interest not paid when due will, to the maximum extent permitted under applicable law, become part of principal, at Lender's option, and thereafter bear like interest as principal. Interest shall be computed on the basis of a 360 day year. All

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Obligations not paid when due shall bear interest at the Default Rate unless waived in writing by Lender. All amounts paid hereunder will be applied to the Obligations in Lender's discretion and as provided in the Loan Agreement.

3. Voluntary Prepayment. Borrower may prepay the Note if and only if Borrower pays to Lender **(i)** the outstanding principal amount of this Note and any unpaid accrued interest **(ii)** the Final Payment, **(iv)** the Prepayment Fee, and **(v)** all other sums, if any, that shall have become due and payable hereunder with respect to this Note.

4. Collateral. This Note is secured by the Collateral.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

5. Waivers. Borrower, and all guarantors and endorsers of this Note, regardless of the time, order or place of signing, hereby waive notice, demand, presentment, protest, and notices of every kind, presentment for the purpose of accelerating maturity, diligence in collection to the fullest extent permitted by law.

6. Choice of Law; Venue. THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. EACH OF BORROWER AND LENDER HEREBY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE CITY AND COUNTY OF SAN FRANCISCO, STATE OF CALIFORNIA. BORROWER AND LENDER EACH HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS NOTE. EACH PARTY FURTHER WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION IN WHICH A JURY TRIAL HAS BEEN WAIVED WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED.

7. Miscellaneous. The Note MAY BE MODIFIED ONLY BY A WRITING SIGNED BY BORROWER AND LENDER. Each provision hereof is severable from every other provision hereof and of the Loan Agreement when determining its legal enforceability. Sections and subsections are titled for convenience, and not for construction. “Hereof,” “herein,” “hereunder,” and similar words refer to this Note in its entirety. “Or” is not necessarily’ exclusive. “Including” is not limiting. The terms and conditions hereof inure to the benefit of and are binding upon the parties’ respective permitted successors and assigns. This Note is subject to all the terms and conditions of the Loan Agreement.

IN WITNESS WHEREOF, Borrower has caused this Note to be executed by a duly authorized officer as of the day and year first above written.

FLUIDIGM CORPORATION

By:

Name:

Title:

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT C

WARRANTS

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

NEITHER THIS WARRANT NOR THE SHARES OF CAPITAL STOCK ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE *"1933 ACT"),* OR ANY APPLICABLE STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED UNLESS SUCH SALE OR TRANSFER IS IN ACCORDANCE WITH THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS OR THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO THE COMPANY, TO THE EFFECT THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS.

PREFERRED STOCK PURCHASE WARRANT

Warrant No. _____

Number of Shares: initially, 185,714
Series D Preferred Stock
subject to increase as set forth below

FLUIDIGM CORPORATION

Effective as of March 29, 2005

Void after March 29, 2012

1. Issuance. This Preferred Stock Purchase Warrant (the "*Warrant*") is issued to **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** by **FLUIDIGM CORPORATION,** a California corporation (hereinafter with its successors called the "*Company*").

2. Purchase Price; Number of Shares.

(a) The registered holder of this Warrant (the "*Holder*"), commencing on the date hereof, is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company, at a price per share of $2.80 (the "*Purchase Price*"), 185,714 fully paid and nonassessable shares of the Company's Series D Preferred Stock, (the "*Exercise Quantity*"), $0.001 par value (the "*Preferred Stock*").

(b) On the Commitment Termination Date, the Exercise Quantity shall automatically be increased by such additional number of shares (rounded to the nearest whole share) of Series D Preferred Stock, if any, as is equal to the amount determined by dividing (A) 4% of the Aggregate Advances under the Loan Agreement, if any, by (B) the Purchase Price

In addition to other terms which may be defined herein, the following terms, as used in this Warrant, shall have the following meanings:

(**i**) "Aggregate Advances" means the aggregate original dollar amount of all Advances made under the Loan Agreement, whether such Advances are outstanding or prepaid, at the time of any scheduled adjustment to the Exercise Quantity.

(**ii**) "Loan Agreement" means that certain Loan and Security Agreement No. 4561 dated March 29, 2005 between the Company and Lighthouse Capital Partners V, L.P..

Any capitalized term not defined herein shall have the meaning as set forth in the Loan Agreement.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided. The person or persons in whose name or names any certificate representing shares of Preferred Stock is issued hereunder shall be deemed to have become the holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

3. Payment of Purchase Price. The Purchase Price may be paid (i) in cash or by check, (ii) by the surrender by the Holder to the Company of any promissory notes or other obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus accrued interest to the date of surrender, or (iii) by any combination of the foregoing.

4. **Net Issue Election.** The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares of Preferred Stock equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company, with the net issue election notice annexed hereto duly executed, at the principal office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Preferred Stock as is computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

where: X = the number of shares of Preferred Stock to be issued to the Holder pursuant to this **Section 4.**

Y = the number of shares of Preferred Stock covered by this Warrant in respect of which the net issue election is made pursuant to this **Section 4.**

A = the Fair Market Value (defined below) of one share of Preferred Stock, as determined at the time the net issue election is made pursuant to this **Section 4.**

B = the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this **Section 4.**

"Fair *Market Value"* of a share of Preferred Stock (or fully paid and nonassessable shares of the Company's common stock, $0.001 par value (the *"Common Stock")* if the Preferred Stock has been automatically converted into Common Stock) as of the date that the net issue election is made (the *"Determination Date")* shall mean:

(i) If the net issue election is made in connection with and contingent upon the closing of the sale of the Company's Common Stock to the public in a public offering pursuant to a Registration Statement under the Securities Act of 1933, as amended (a *"Public Offering")*, and if the Company's Registration Statement relating to such Public Offering *("Registration Statement")* has been declared effective by the Securities and Exchange Commission, then the initial "Price to Public" specified in the final prospectus with respect to such offering multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible.

(ii) If the net issue election is not made in connection with and contingent upon a Public Offering, then as follows:

(a) If traded on a securities exchange or the Nasdaq National Market, the fair market value of the Common Stock shall be deemed to be the average of the closing or last reported sale prices of the Common Stock on such exchange or market over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible;

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(b) If otherwise traded in an over-the-counter market, the fair market value of the Common Stock shall be deemed to be the average of the closing ask prices of the Common Stock over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible; and

(c) If there is no public market for the Common Stock, then fair market value shall be determined in good faith by the Company's Board of Directors.

5. Partial Exercise. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. Fractional Shares. In no event shall any fractional share of Preferred Stock be issued upon any exercise of this Warrant. If, upon exercise of this Warrant in its entirety, the Holder would, except as provided in this **Section 6,** be entitled to receive a fractional share of Preferred Stock, then the Company shall issue the next higher number of full shares of Preferred Stock, issuing a full share with respect to such fractional share.

7. Expiration Date; Automatic Exercise. This Warrant shall expire at the close of business on March 29, 2012, and shall be void thereafter (the *"Expiration Date").* Notwithstanding the term of this Warrant fixed pursuant to this **Section 7,** and provided Holder has received advance written notice of at least twenty (20) days and has not earlier exercised this Warrant, and provided this Warrant has not been assumed by the successor entity (or parent thereof), upon the consummation of a Merger (as defined below), this Warrant shall automatically be exercised pursuant to **Section 4** hereof, without any action by Holder. *"Merger"* means: (i) a sale of all or substantially all of the Company's assets to an Unaffiliated Entity (as defined below), or (ii) the merger, consolidation or acquisition of the Company with, into or by an Unaffiliated Entity (other than a merger or consolidation for the principle purpose of changing the domicile of the Company or a bona fide round of preferred stock equity financing), that results in the Company's shareholders immediately prior to such merger, consolidation, or acquisition holding, immediately thereafter, less than a majority of the outstanding voting securities of the successor corporation or its parent. *"Unaffiliated Entity"* means any entity that is owned or controlled by parties who own less than twenty percent (20%) of the combined voting power of the voting securities of the Company immediately prior to such merger or sale of assets, consolidation or acquisition. Notwithstanding the foregoing, in the event that any outstanding warrants to purchase equity securities of the Company (it being acknowledged and agreed that options to acquire common stock issued to officers, directors, employees and consultants shall not be deemed "warrants") are assumed by the successor entity of a Merger (or parent thereof), this Warrant shall also be similarly assumed and the automatic exercise provision in this **Section 7** shall have no effect. The Company agrees to give the Holder written notice promptly after it has entered into a definitive agreement relating to any proposed Merger and written notice of termination of any definitive agreement relating to any proposed Merger. Notwithstanding anything to the contrary in this Warrant, (i) the Holder may expressly make any voluntary exercise of this Warrant contingent on, and effective immediately prior to, the consummation of such Merger and (ii) any automatic exercise of this Warrant in connection with a Merger shall be conditioned on consummation of such Merger and shall be effective immediately prior thereto.

8. Reserved Shares; Valid Issuance. The Company covenants that it will at all times from and after the date hereof reserve and keep available such number of its authorized shares of Preferred Stock and Common Stock free from all preemptive or similar rights therein, as will be sufficient to permit, respectively, the exercise of this Warrant in full and the conversion into shares of Common Stock of all shares of Preferred Stock receivable upon such exercise. The Company further covenants that such shares as may be issued pursuant to such exercise and/or conversion will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. Stock Splits and Dividends. If after the date hereof the Company shall subdivide the Preferred Stock, by split-up or otherwise, or combine the Preferred Stock, or issue additional shares of Preferred Stock in payment of a stock dividend on the Preferred Stock, the number of shares of Preferred Stock issuable on the exercise

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of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. Adjustments for Diluting Issuances. The antidilution rights applicable to the Series D Preferred Stock of the Company are set forth in the Amended and Restated Articles of Incorporation, as amended from time to time (the *"Articles")*, a true and complete copy in its current form which has been made available to Holder. Such rights shall not be restated, amended or modified in any manner which affects the Holder differently than the holders of outstanding Series D Preferred Stock without such Holder's prior written consent. The Company shall provide the Holder hereof with any restatement, amendment or modification to the Articles promptly after the same has been made.

11. Mergers and Reclassifications. (a) Except as set forth in **Section 7,** If after the date hereof the Company shall enter into any Reorganization (as hereinafter defined), then, as a condition of such Reorganization, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such Reorganization by a holder of the number of shares of Preferred Stock which might have been purchased by the Holder immediately prior to such Reorganization, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof (including without limitation, provisions for the adjustment of the Purchase Price and the number of shares issuable hereunder and the provisions relating to the net issue election) shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof. For the purposes of this **Section 11,** the term *"Reorganization"* shall include without limitation any reclassification, capital reorganization or change of the Preferred Stock (other than as a result of a subdivision, combination or stock dividend provided for in **Section 9** hereof), or any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a merger in which the Company is the surviving corporation and which does not result in any reclassification or change of the outstanding Preferred Stock), or any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company.

(b) Notwithstanding any other provision of this Warrant, in the event of an automatic conversion of the Company's outstanding Series D Preferred Stock into Common Stock in accordance with the Company's Articles, as in effect from time to time, this Warrant shall thereafter represent the right to acquire for the aggregate Purchase Price (as then in effect) the number of shares of Common Stock into which the number of shares of Preferred Stock issuable upon exercise of this Warrant would have then been convertible.

12. Certificate of Adjustment. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate of the Company's chief financial officer (or other appropriate officer) setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

13. Notices of Record Date, Etc. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase, sell or otherwise acquire or dispose of any shares of stock of any class or any other securities or property, or to receive any other right;

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets; or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company;

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

then in each such event the Company will provide or cause to be provided to the Holder a written notice thereof. Such notice shall be provided at least twenty (20) business days prior to the date specified in such notice on which any such action is to be taken.

14. Representations, Warranties and Covenants. This Warrant is issued and delivered by the Company and accepted by each Holder on the basis of the following representations, warranties and covenants made by the Company:

(a) The Company has all necessary corporate power and authority to issue, execute and deliver this Warrant and to perform its obligations hereunder. This Warrant has been duly authorized issued, executed and delivered by the Company and is the valid and binding obligation of the Company, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy or similar laws relating to the enforcement of creditors' rights generally.

(b) The shares of Preferred Stock issuable upon the exercise of this Warrant have been duly authorized and reserved for issuance by the Company and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable.

(c) The issuance, execution and delivery of this Warrant do not, and the issuance of the shares of Preferred Stock upon the exercise of this Warrant in accordance with the terms hereof will not, (i) violate or contravene the Company's Articles or by-laws, or any law, statute, regulation, rule, judgment or order applicable to the Company, (ii) violate, contravene or result in a breach or default under any contract, agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound or (iii) require the consent or approval of or the filing of any notice or registration with any person or entity (other than such notices or filings as may be required under applicable securities laws).

(d) As long as this Warrant is, or any shares of Preferred Stock issued upon exercise of this Warrant or any shares of Common Stock issued upon conversion of such shares of Preferred Stock are, issued and outstanding, the Company will provide to the Holder the financial and other information described in that certain Loan and Security Agreement No. 4561 between the Company and Lighthouse Capital Partners V, L.P. dated as of March 29, 2005.

(e) As of the date hereof, the authorized capital stock of the Company consists of (i) 65,500,000 shares of Common Stock, of which 8,909,357 shares are issued and outstanding and 185,714 shares are reserved for issuance upon the exercise of this Warrant with respect to Common Stock and the conversion of the Preferred Stock into Common Stock if this Warrant is exercised with respect to Preferred Stock, (ii) 2,727,273 shares of Series A Preferred Stock, of which 2,727,273 are issued and outstanding shares, (iii) 6,460,675 shares of Series B Preferred Stock, of which 6,460,675 are issued and outstanding shares, (iv) 20,551,163 shares of Series C Preferred Stock, of which 16,364,832 are issued and outstanding shares, and (v) 13,887,716 shares of Series D Preferred Stock, of which 7,292,127 are issued and outstanding shares. Company has delivered a capitalization table to Holder summarizing the capitalization of the Company. At the request of Holder, not more than once per calendar quarter, the Company will provide Holder with a current capitalization table indicating changes, if any, to the number of outstanding shares of common stock and preferred stock.

15. Registration Rights. The Company grants to the Holder all the rights of a "Holder" [and an "Investor"] under the Company's Amended and Restated Investors' Rights Agreement dated as of December 18, 2003 (the *"Rights Agreement")*, including, without limitation, the registration rights contained therein, and agrees to amend the Rights Agreement so that (i) the shares of Common Stock issuable upon conversion of the shares of Preferred Stock issuable upon exercise of this Warrant shall be *"Registrable Securities,"* and (ii) the Holder shall be a "Holder" [and an "Investor"] for all purposes of such Rights Agreement.

16. Amendment. The terms of this Warrant may be amended, modified or waived only with the written consent of the Holder and the Company.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

17. Representations and Covenants of the Holder. This Warrant has been entered into by the Company in reliance upon the following representations and covenants of the Holder, which by its execution hereof the Holder hereby confirms:

(a) Investment Purpose. The right to acquire Preferred Stock or the Preferred Stock issuable upon exercise of the Holder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Holder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Accredited Investor. Holder is an "accredited investor" within the meaning of Rule 501 of Regulation D, promulgated under the 1933 Act as presently in effect.

(c) Private Issue. The Holder understands (i) that neither the issuance of this Warrant nor the issuance of any shares of the Company's capital stock issuable upon exercise of the Holder's rights contained herein has been registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuances contemplated by this Warrant will be exempt from the registration and qualifications requirements thereof, and (ii) that the Company's reliance on such exemption is predicated on the representations of the Holderset forth in this **Section 17.**

(d) Financial Risk. The Holder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment and has the ability to bear the economic risks of its investment.

18. Notices, Transfers, Etc.

(a) Any notice or written communication required or permitted to be given to the Holder may be given by certified mail or delivered to the Holder at the address most recently provided by the Holder to the Company.

(b) Subject to compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment notice annexed hereto duly executed, for transfer of this Warrant as an entirety by the Holder, the Company shall issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer with respect to a portion of the shares of Preferred Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof, and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

(c) In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon surrender and cancellation of any mutilated Warrant, or (ii) in lieu of any Warrant lost, stolen or destroyed, upon receipt of an affidavit of the Holder or other evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant.

19. No Impairment. The Company will not, by amendment of its Articles or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance of performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder. In no event shall any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other transaction be deemed an "impairment" for purposes of this Section 18 if the shares of the Company's capital stock issuable upon exercise of this Warrant are affected thereby in the same manner as outstanding shares of such capital stock.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

20. Governing Law. The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the State of California without giving effect to its principles regarding conflicts of laws.

21. Successors and Assigns. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

22. Business Days. If the last or appointed day for the taking of any action required or the expiration of any rights granted herein shall be a Saturday or Sunday or a legal holiday in California, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

23. Value. The Company and the Holder agree that the value of this Warrant on the date of grant is $100.

FLUIDIGM CORPORATION

By:

Name:

Title:

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Subscription

To:

Date:

The undersigned hereby subscribes for _____ shares of Preferred Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

Signature

Name for Registration

Mailing Address

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Net Issue Election Notice

To: Date:

The undersigned hereby elects under **Section 4** to surrender the right to purchase shares of Preferred Stock pursuant to this Warrant. The certificate(s) for such shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below:

Signature

Name for Registration

Mailing Address

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Assignment

For value received _____ hereby sells, assigns and transfers unto

[Please print or typewrite name and address of Assignee]

the within Warrant, and does hereby irrevocably constitute and appoint its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

Dated:

_____
Signature

_____
Name for Registration

In the Presence of:

_____

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Confidential Treatment Requested by Fluidigm Corporation

EXHIBIT A

Amended and Restated Certificate of Incorporation

See attached pages.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Confidential Treatment Requested by Fluidigm Corporation

EXHIBIT A

Amended and Restated Articles of Incorporation

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Confidential Treatment Requested by Fluidigm Corporation

AMENDED AND RESTATED

ARTICLES OF INCORPORATION OF

FLUIDIGM CORPORATION

Gajus V. Worthington and William Smith certify that:

1. They are the President and Secretary, respectively, of Fluidigm Corporation, a California corporation (the "Corporation").

2. The Articles of Incorporation of the Corporation are amended and restated in full to read as set forth in EXHIBIT A attached hereto and incorporated by reference as if fully set forth herein.

3. Said Amended and Restated Articles of Incorporation have been duly approved by the Corporation's Board of Directors.

4. Said Amended and Restated Articles of Incorporation have been duly approved by the required vote of shareholders in accordance with Sections 902 and 903 of the Corporations Code. The total number of outstanding shares of the corporation is 7,753,917 shares of Common Stock, 2,727,273 shares of Series A Preferred Stock, 6,460,675 shares of Series B Preferred Stock and 14,315,608 shares of Series C Preferred Stock. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50% of the outstanding Common Stock, voting as a single class, more than 66 2/3% of the outstanding Series C Preferred Stock, voting as a single class, more than 66 2/3% of the outstanding Preferred Stock voting as a single class and more than 50% of the outstanding Common Stock and Preferred Stock, voting together as a single class.

I further declare under penalty of perjury that the matters set forth in the foregoing certificate are true and correct of my own knowledge.

Executed at Palo Alto, California, this __ day of October, 2002.

Gajus V. Worthington
President

William Smith
Secretary

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit A

AMENDED AND RESTATED

ARTICLES OF INCORPORATION OF

FLUIDIGM CORPORATION

ARTICLE I

The name of the corporation is Fluidigm Corporation.

ARTICLE II

The purpose of this corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of California other than the banking business, the trust company business or the practice of a profession permitted to be incorporated under the California Corporations Code.

ARTICLE III

The total number of shares of stock that the corporation shall have authority to issue is Seventy-Four Million Three Hundred Ninety Thousand Two Hundred Seventy-Four (74,390,274), consisting of Forty-Four Million Six Hundred Fifty-One Thousand One Hundred Sixty-Three (44,651,163) shares of Common Stock, $0.001 par value per share, and Twenty-Nine Million Seven Hundred Thirty-Nine Thousand One Hundred Eleven (29,739,111) shares of Preferred Stock, $0.001 par value per share. The first series of Preferred Stock shall be designated "Series A Preferred Stock" and shall consist of Two Million Seven Hundred Twenty–Seven Thousand Two Hundred Seventy–Three (2,727,273) shares. The second series of Preferred Stock shall be designated "Series B Preferred Stock" and shall consist of Six Million Four Hundred Sixty Thousand Six Hundred Seventy-Five (6,460,675) shares. The third series of Preferred Stock shall be designated "Series C Preferred Stock" and shall consist of Twenty Million Five Hundred Fifty-One Thousand One Hundred Sixty-Three (20,551,163) shares.

ARTICLE IV

The terms and provisions of the Common Stock and Preferred Stock are as follows:

1. Definitions. For purposes of this Article IV, the following definitions shall apply:

(a) "Conversion Price" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 per share for the Series B Preferred Stock and $2.58 per share for the Series C Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

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(b) "Convertible Securities" shall mean any evidences of indebtedness, shares or other securities (other than shares of Preferred Stock) convertible into or exchangeable for Common Stock.

(c) "Corporation" shall mean Fluidigm Corporation.

(d) "Dividend Rate" shall mean an annual rate of $0.11 per share for the Series A Preferred Stock, an annual rate of $0.18 for the Series B Preferred Stock and an annual rate of $0.26 per share for the Series C Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(e) "Liquidation Preference" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 per share for the Series B Preferred Stock and $2.58 per share for the Series C Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(f) "Options" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(g) "Original Issue Price" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 for the Series B Preferred Stock and $2.58 per share for the Series C Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(h) "Preferred Stock" shall mean the Series A Preferred Stock, Series B Preferred Stock and the Series C Preferred Stock.

2. Dividends.

(a) Series C Preferred Stock. The holders of outstanding shares of Series C Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Series A Preferred Stock, Series B Preferred Stock or Common Stock (collectively, the "**Junior Stock**") of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Junior Stock during any fiscal year of the Corporation, other than dividends on the Common Stock payable solely in Common Stock, until all declared dividends on the Series C Preferred Stock have been paid or set apart for payment to the Series C Preferred Stock holders. The right to receive dividends on shares of Series C Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series C Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(b) Series A Preferred Stock and Series B Preferred Stock. The holders of outstanding shares of Series A Preferred Stock and Series B Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Common Stock of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made

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with respect to the Common Stock, other than dividends payable solely in Common Stock, until all declared dividends on the Preferred Stock have been paid or set apart for payment to the Preferred Stock holders. Payment of any dividends to the holders of the Series A Preferred Stock and Series B Preferred Stock shall be on a pro-rata, pari passu basis in proportion to the Dividend Rates for the Series A Preferred Stock and Series B Preferred Stock, as applicable. The right to receive dividends on shares of Series A Preferred Stock and Series B Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series A Preferred Stock or Series B Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(c) Distribution. For purposes of this Section 2, unless the context otherwise requires, a "**distribution**" shall mean the transfer of cash or other property without consideration whether by way of dividend or otherwise, payable other than in Common Stock, or the purchase or redemption of shares of the Corporation other than (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors; and (ii) repurchase of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors; and (iii) any other repurchase or redemption of capital stock of the corporation unanimously approved by the Board of Directors and approved by the holders of the majority of the Common Stock and the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock, voting as separate classes.

(d) Common Stock. Dividends may be paid on the Common Stock as and when declared by the Board of Directors, subject to the prior dividend rights of the Preferred Stock and Section 6 below.

(e) Non-Cash Distributions. Whenever a distribution provided for in this Section 2 shall be payable in property other than cash, the value of such distribution shall be deemed to be the fair market value of such property as determined in good faith by the Board of Directors.

(f) Consent to Certain Repurchases. As authorized by Section 402.5(c) of the California Corporations Code, Sections 502, 503 and 506 of the California Corporations Code shall not apply with respect to payments made by the Corporation in connection with (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors, and (ii) repurchase of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors, and (iii) any other repurchase or redemption of capital stock of the Corporation unanimously approved by the Board of Directors and approved by the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class.

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3. Liquidation Rights.

(a) Series C Liquidation Preference. In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, the holders of the Series C Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock and the Series B Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series C Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series C Preferred Stock. If upon the liquidation, dissolution or winding up of the Corporation, the assets of the Corporation legally available for distribution to the holders of the Series C Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(a), then the entire assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series C Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(a).

(b) Series B Liquidation Preference. After the payment to the holders of Series C Preferred Stock of the full amounts specified in Section 3(a) above, the holders of the Series B Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock and the Series A Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series B Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series B Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series B Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(b), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series B Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(b).

(c) Series A Liquidation Preference. After the payment to the holders of Series C Preferred Stock and the holders of Series B Preferred Stock of the full amounts specified in Sections 3(a) and 3(b) above, the holders of the Series A Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock by reason of their ownership of such stock, an amount per share for each share of Series A Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series A Preferred Stock. If remaining assets of the Corporation legally available for distribution to the holders of the Series A Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(c), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series A Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(c).

(d) Remaining Assets. After the payment to the holders of Preferred Stock of the full amounts specified in Sections 3(a), 3(b) and 3(c) above, the entire remaining assets of the

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Corporation legally available for distribution shall be distributed pro-rata to holders of the Common Stock of the Corporation in proportion to the number of shares of Common Stock held by them.

(e) Shares Not Treated as Both Preferred Stock and Common Stock in Any Distribution. Shares of Preferred Stock shall not be entitled to be converted into shares of Common Stock in order to participate in any distribution, or series of distributions, as shares of Common Stock, without first foregoing participation in the distribution, or series of distributions, as shares of Preferred Stock.

(f) Reorganization. For purposes of this Section 3, a liquidation, dissolution or winding up of the Corporation shall be deemed to be occasioned by, or to include, (i) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any merger effected exclusively for the purpose of changing the domicile of the Corporation) other than a transaction or series of transactions in which the holders of the voting securities of the Corporation outstanding immediately prior to such transaction or series of transactions continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Corporation held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Corporation or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, transfer, lease or other conveyance of all or substantially all of the assets of the Corporation.

(g) Valuation of Non-Cash Consideration. If any assets of the Corporation distributed to shareholders in connection with any liquidation, dissolution, or winding up of the Corporation are other than cash, then the value of such assets shall be their fair market value as determined in good faith by the Board of Directors, except that any securities to be distributed to shareholders in a liquidation, dissolution, or winding up of the Corporation shall be valued as follows:

(i) If the securities are then traded on a national securities exchange or the Nasdaq Stock Market System (or a similar national quotation system), then the value of the securities shall be deemed to be to the average of the closing prices of the securities on such exchange or system over the ten (10) trading day period ending five (5) trading days prior to the distribution;

(ii) if the securities are actively traded over-the-counter, then the value of the securities shall be deemed to be the average of the closing bid prices of the securities over the ten (10) trading day period ending five (5) trading days prior to the distribution; or

(iii) if there is no active public market for the securities, then the value of the securities shall be deemed to be the fair market value thereof as determined in good faith by the Board of Directors which determination shall include consideration of the illiquidity of the securities.

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In the event of a merger or other acquisition of the Corporation by another entity, the distribution date shall be deemed to the date such transaction closes.

For the purposes of this subsection 3(g), "**trading day**" shall mean any day on which the exchange or system on which the securities to be distributed are traded is open, and "closing prices" or "closing bid prices" shall be deemed to be: (i) for securities traded primarily on the New York Stock Exchange, the American Stock Exchange or Nasdaq, the last reported trade price or sale price, as the case may be, at 4:00 p.m., New York time, on that day and (ii) for securities listed or traded on other exchanges, markets and systems, the market price as of the end of the "regular hours" trading period that is generally accepted as such for such exchange, market or system. If, after the date hereof, the benchmark times generally accepted in the securities industry for determining the market price of a stock as of a given trading day shall change from those set forth above, the fair market value shall be determined as of such other generally accepted benchmark times.

4. Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the "**Conversion Rights**"):

(a) Right to Convert. Subject to Section 4(c), each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share at the office of the Corporation or any transfer agent for the Preferred Stock, into that number of fully-paid, nonassessable shares of Common Stock determined by dividing the Original Issue Price for the relevant series by the Conversion Price for such series. (The number of shares of Common Stock into which each share of Preferred Stock of a series may be converted is hereinafter referred to as the "**Conversion Rate**" for each such series.) Upon any decrease or increase in the Conversion Price for any series of Preferred Stock, as described in this Section 4, the Conversion Rate for such series shall be appropriately increased or decreased.

(b) Automatic Conversion. Each share of Preferred Stock shall automatically be converted into fully-paid, non-assessable shares of Common Stock at the then effective Conversion Rate for such share (i) immediately prior to the closing of a firm commitment underwritten initial public offering on Form S-1 (or successor form) filed under the Securities Act of 1933, as amended (the "**Securities Act**"), covering the offer and sale of the Corporation's Common Stock, provided that the offering price per share is not less than $7.10 (as adjusted for stock splits or stock dividends) and the aggregate gross proceeds to the Corporation are not less than $25,000,000, or (ii) upon the receipt by the Corporation of a written request for such conversion from the holders of two-thirds of the shares of Preferred Stock then outstanding, or, if later, the effective date for conversion specified in such requests (each of the events referred to in (i) and (ii) being hereinafter referred to as an "**Automatic Conversion Event**").

(c) Mechanics of Conversion. No fractional shares of Common Stock shall be issued upon conversion of Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the then fair market value of a share of Common Stock as determined by the Board of Directors. For such purpose, all shares of Preferred Stock held by each holder of Preferred Stock shall be aggregated, and any resulting fractional share of Common Stock shall be paid in cash. Before any holder of Preferred Stock shall be entitled to convert the same into full shares of Common Stock, and

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to receive certificates therefor, he shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or of any transfer agent for the Preferred Stock, and shall give written notice to the Corporation at such office that he elects to convert the same; provided, however, that on the date of an Automatic Conversion Event, the outstanding shares of Preferred Stock shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent; provided further, however, that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such Automatic Conversion Event unless either the certificates evidencing such shares of Preferred Stock are delivered to the Corporation or its transfer agent as provided above, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. On the date of the occurrence of an Automatic Conversion Event, each holder of record of shares of Preferred Stock shall be deemed to be the holder of record of the Common Stock issuable upon such conversion, notwithstanding that the certificates representing such shares of Preferred Stock shall not have been surrendered at the office of the Corporation, that notice from the Corporation shall not have been received by any holder of record of shares of Preferred Stock, or that the certificates evidencing such shares of Common Stock shall not then be actually delivered to such holder.

The Corporation shall, as soon as practicable after such delivery, or after such agreement and indemnification, issue and deliver at such office to such holder of Preferred Stock, a certificate or certificates for the number of shares of Common Stock to which he shall be entitled as aforesaid and a check payable to the holder in the amount of any cash amounts payable as the result of a conversion into fractional shares of Common Stock, plus any declared and unpaid dividends on the converted Preferred Stock. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date; provided, however, that if the conversion is in connection with an underwritten offer of securities registered pursuant to the Securities Act the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing of the sale of securities pursuant to such offering, in which event the person(s) entitled to receive the Common Stock issuable upon such conversion of the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of the sale of such securities.

(d) Adjustments to Conversion Price for Diluting Issues.

(i) Special Definition. For purposes of this paragraph 4(d), "**Additional Shares of Common**" shall mean all shares of Common Stock issued (or, pursuant to paragraph 4(d)(iii), deemed to be issued) by the Corporation after the filing of these Articles of Incorporation, other than:

(1) shares of Common Stock issued or issuable upon conversion of shares of Preferred Stock;

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(2) shares of Common Stock issued or issuable to officers, directors and employees of, or consultants and other service providers to, the Corporation pursuant to stock grants, option plans, purchase plans or other employee stock incentive programs or arrangements approved by the Board of Directors or upon exercise of options or warrants granted to such parties pursuant to any such plan, program or arrangement;

(3) shares of Common Stock issued upon the exercise or conversion of Options or Convertible Securities outstanding as of the date of the filing of these Articles of Incorporation;

(4) shares of Common Stock issued or issuable as a dividend or distribution on Preferred Stock or pursuant to any event for which adjustment is made pursuant to paragraph 4(e), 4(f) or 4(g) hereof;

(5) shares of Common Stock issued in a registered public offering under the Securities Act pursuant to which all outstanding shares of Preferred Stock are automatically converted into Common Stock pursuant to an Automatic Conversion Event;

(6) shares of Common Stock issued or issuable pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided, that such issuances are unanimously approved by the Board of Directors; and

(7) shares of Common Stock issued or issuable to banks, equipment lessors or other financial institutions pursuant to a commercial leasing or debt financing transaction approved by the Board of Directors.

(ii) No Adjustment of Conversion Price. No adjustment in the Conversion Price of a particular series of Preferred Stock shall be made in respect of the issuance of Additional Shares of Common unless the consideration per share (as determined pursuant to paragraph 4(d)(v)) for an Additional Share of Common issued or deemed to be issued by the Corporation is less than the Conversion Price in effect on the date of, and immediately prior to such issue, for such series of Preferred Stock.

(iii) Deemed Issue of Additional Shares of Common. In the event the Corporation at any time or from time to time after the date of the filing of these Articles of Incorporation shall issue any Options or Convertible Securities or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein for a subsequent adjustment of such number) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible Securities, the conversion or exchange of such Convertible Securities or, in the case of Options for Convertible Securities, the exercise of such Options and the conversion or exchange of the underlying securities, shall be deemed to have been issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that in any such case in which shares are deemed to be issued:

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(1) no further adjustment in the Conversion Price of the Preferred Stock shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock in connection with the exercise of such Options or conversion or exchange of such Convertible Securities;

(2) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any increase in the consideration payable to the Corporation, or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price of the Preferred Stock computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities;

(3) no readjustment pursuant to clause (2) above shall have the effect of increasing the Conversion Price of the Preferred Stock to an amount which exceeds the lower of (i) the Conversion Price of the Preferred Stock on the original adjustment date, or (ii) the Conversion Price of the Preferred Stock that would have resulted from any issuance of Additional Shares of Common between the original adjustment date and such readjustment date;

(4) upon the expiration of any such Options or any rights of conversion or exchange under such Convertible Securities which shall not have been exercised, the Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto) and any subsequent adjustments based thereon shall, upon such expiration, be recomputed as if:

(A) in the case of Convertible Securities or Options for Common Stock, the only Additional Shares of Common issued were the shares of Common Stock, if any, actually issued upon the exercise of such Options or the conversion or exchange of such Convertible Securities and the consideration received therefor was the consideration actually received by the Corporation for the issue of such exercised Options plus the consideration actually received by the Corporation upon such exercise or for the issue of all such Convertible Securities which were actually converted or exchanged, plus the additional consideration, if any, actually received by the Corporation upon such conversion or exchange, and

(B) in the case of Options for Convertible Securities, only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such Options, and the consideration received by the Corporation for the Additional Shares of Common deemed to have been then issued was the consideration actually received by the Corporation for the issue of such exercised Options, plus the consideration deemed to have been received by the Corporation (determined pursuant to Section 4(d)(v)) upon the issue of the Convertible Securities with respect to which such Options were actually exercised; and

(5) if such record date shall have been fixed and such Options or Convertible Securities are not issued on the date fixed therefor, the adjustment previously made in the Conversion Price which became effective on such record date shall be canceled as of the close of

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business on such record date, and thereafter the Conversion Price shall be adjusted pursuant to this paragraph 4(d)(iii) as of the actual date of their issuance.

(iv) Adjustment of Conversion Price Upon Issuance of Additional Shares of Common. In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to paragraph 4(d)(iii)) without consideration or for a consideration per share less than the applicable Conversion Price of a series of Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the affected series of Preferred Stock shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Subsection 4(d)(iv), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Subsection 4(d)(iii) hereof, shall be deemed to be outstanding.

(v) Determination of Consideration. For purposes of this subsection 4(d), the consideration received by the Corporation for the issue (or deemed issue) of any Additional Shares of Common shall be computed as follows:

(1) Cash and Property. Such consideration shall:

(A) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation excluding amounts paid or payable for accrued interest or accrued dividends;

(B) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(C) in the event Additional Shares of Common are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (a) and (b) above, as reasonably determined in good faith by the Board of Directors.

(2) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common deemed to have been issued pursuant to paragraph 4(d)(iii) shall be determined by dividing

(X) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating

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thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities by

(Y) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities.

(e) Adjustments for Subdivisions or Combinations of Common Stock. In the event the outstanding shares of Common Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Common Stock, the Conversion Price of each series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Common Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Common Stock, the Conversion Prices in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(f) Adjustments for Subdivisions or Combinations of Preferred Stock. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(g) Adjustments for Reclassification, Exchange and Substitution. Subject to Section 3 above ("**Liquidation Rights** "), if the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for above), then, in any such event, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive each holder of such Preferred Stock shall have the right thereafter to convert such shares of Preferred Stock into a number of shares of such other class or classes of stock which a holder of the number of shares of Common Stock deliverable upon conversion of such series of Preferred Stock immediately before that change would have been entitled to receive in such reorganization or reclassification, all subject to further adjustment as provided herein with respect to such other shares.

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(h) No Impairment. The Corporation will not through any reorganization, transfer of assets, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation but will at all times in good faith assist in the carrying out of all the provisions of this Section 4 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of Preferred Stock against impairment. Notwithstanding the foregoing, nothing in this Section 4(h) shall prohibit the Corporation from amending its Articles of Incorporation with the requisite consent of its shareholders and the board of directors.

(i) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 4, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of Preferred Stock.

(j) Notices of Record Date. In the event that this Corporation shall propose at any time:

(i) to declare any dividend or distribution upon its Common Stock, whether in cash, property, stock or other securities, whether or not a regular cash dividend and whether or not out of earnings or earned surplus;

(ii) to effect any reclassification or recapitalization of its Common Stock outstanding involving a change in the Common Stock; or

(iii) to voluntarily liquidate or dissolve or to enter into any transaction deemed to be a liquidation, dissolution or winding up of the corporation pursuant to Section 3(f);

then, in connection with each such event, this Corporation shall send to the holders of the Preferred Stock at least 14 days' prior written notice of the date on which a record shall be taken for such dividend, distribution or subscription rights (and specifying the date on which the holders of Common Stock shall be entitled thereto) or for determining rights to vote in respect of the matters referred to in (ii) and (iii) above.

Each such written notice shall be given by first class mail, postage prepaid, addressed to the holders of Preferred Stock at the address for each such holder as shown on the books of this Corporation.

The right of the holders of the Preferred Stock to notice hereunder may be waived, either prospectively or retroactively and either generally or in a particular instance, by the holders of more

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than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class.

(k) Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

(l) Waiver of Adjustment of Conversion Price. Notwithstanding anything herein to the contrary, any downward adjustment of the Conversion Price of any series of Preferred Stock may be waived, either prospectively or retroactively and either generally or in a particular instance, by the consent or vote of the holders of more than two-thirds (2/3) of the outstanding shares of such series. Any such waiver shall bind all future holders of shares of such series of Preferred Stock.

5. Voting.

(a) Restricted Class Voting. Except as otherwise expressly provided herein or as required by law, the holders of Preferred Stock and the holders of Common Stock shall vote together and not as separate classes.

(b) No Series Voting. Other than as provided herein or required by law, there shall be no series voting.

(c) Preferred Stock. Each holder of Preferred Stock shall be entitled to the number of votes equal to the number of shares of Common Stock into which the shares of Preferred Stock held by such holder could be converted as of the record date. The holders of shares of the Preferred Stock shall be entitled to vote on all matters on which the Common Stock shall be entitled to vote. Holders of Preferred Stock shall be entitled to notice of any shareholders' meeting in accordance with the Bylaws of the Corporation. Fractional votes shall not, however, be permitted and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted), shall be disregarded.

(d) Common Stock. Each holder of shares of Common Stock shall be entitled to one vote for each share thereof held.

(e) Election of Directors. So long as at least 2,000,000 shares (as adjusted for Recapitalizations) of Preferred Stock remain outstanding, the holders of Series C Preferred Stock, voting as a separate class, shall be entitled to elect three (3) members of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's shareholders for the election of directors. Any additional members of the Corporation's Board of Directors shall be elected by the holders of Common Stock, Series A Preferred Stock and Series B Preferred Stock,

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voting together as a single class. If a vacancy on the Board of Directors is to be filled by the Board of Directors, only directors elected by the same class or classes of shareholders as those who would be entitled to vote to fill such vacancy shall vote to fill such vacancy.

6. Amendments and Changes Requiring Approval of Preferred Stock. As long as any of the Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class:

(a) amend, alter or repeal any provision of the Articles of Incorporation or By-laws of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Preferred Stock or any series thereof;

(b) enter into any transaction or series of related transactions deemed to be a liquidation, dissolution or winding up of the Corporation pursuant to Section 3(f) above.

(c) voluntarily liquidate or dissolve;

(d) declare or pay any distribution (as defined in Section 2(c)) with respect to the Common Stock of the Corporation;

(e) permit any subsidiary of the Corporation to sell securities to a third party;

(f) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Preferred Stock;

(g) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, liquidation, redemption, conversion or other rights senior to or on a parity with any series of Preferred Stock or with respect to voting senior to any series of Preferred Stock;

(h) increase or decrease the authorized number of directors of the Corporation; or

(i) amend this Section 6.

7. Amendments and Changes Requiring the Approval of the Series C Preferred Stock. As long as any of the Series C Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of two-thirds of the outstanding shares of the Series C Preferred Stock:

(a) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series C Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series C Preferred Stock;

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(c) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series C Preferred Stock or with respect to voting senior to the Series C Preferred Stock;

(d) declare or pay any distribution (as defined in Section 2(c)) with respect to the Common Stock or Preferred Stock of the Corporation;

(e) increase the authorized number of directors of the Corporation above nine (9); or

(f) amend this Section 7.

8. Amendments and Changes Requiring the Approval of the Series B Preferred Stock. As long as any of the Series B Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of two-thirds of the outstanding shares of the Series B Preferred Stock:

(a) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series B Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series B Preferred Stock; or

(c) amend this Section 8.

9. Status of Converted Stock. In the event any shares of Preferred Stock shall be converted pursuant to Article 4 hereof, then the shares so converted shall be cancelled and shall not be issuable by the Corporation. The Articles of Incorporation shall be appropriately amended to effect the corresponding reduction in the Corporation's authorized capital stock.

10. Notices. Any notice required by the provisions of this Article IV to be given to the holders of Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at such holder's address appearing on the books of the Corporation.

ARTICLE V

1. Limitation of Directors' Liability. The liability of the directors of this Corporation for monetary damages shall be eliminated to the fullest extent permissible under California law.

2. Indemnification of Corporate Agents. This Corporation is authorized to provide indemnification of agents (as defined in Section 317 of the California Corporations Code) through bylaw provisions, agreements with agents, votes of shareholders or disinterested directors or

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otherwise, in excess of the indemnification otherwise permitted by Section 317 of the California Corporations Code, subject only to the applicable limits set forth in Section 204 of the California Corporations Code with respect to actions for breach of duty to this Corporation and its shareholders.

3. Repeal or Modification. Any repeal or modification of the foregoing provisions of this Article V shall not adversely affect any right of indemnification or limitation of liability of an agent of this Corporation relating to acts or omissions occurring prior to such repeal or modification.

(THE GREAT SEAL OF THE STATE OF CALIFORNIA - OFFICE OF THE SECRETARY OF STATE)

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EXHIBIT D

NOTICE OF BORROWING

_____, ____

Lighthouse Capital Partners V, L.P.

500 Drake's Landing Road
Greenbrae, CA 94904-3011

Ladies and Gentlemen:

Reference is made to the Loan and Security Agreement No. 4561 dated as of March 29, 2005 (as it has been and may be amended from time to time, the "*Loan Agreement*," initially capitalized terms used herein as defined therein), between **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** and **FLUIDIGM CORPORATION** (the "*Company*")

The undersigned is the President and CEO of the Company, and hereby irrevocably requests an Advance under the Loan Agreement, and in that connection certifies as follows:

1. The amount of the proposed Advance is $_____. The business day of the proposed Advance is _____.

2. The Loan Commencement Date for this Advance shall be March 1, 2006.

3. As of this date, no Event of Default, or event which with notice or the passage of time would constitute an Event of Default, has occurred and is continuing, or will result from the making of the proposed Advance, and the representations and warranties of the Company contained in **Section 5** of the Loan Agreement are true and correct in all material respects.

4. No event that could reasonably be expected to have a material adverse effect on the ability of Borrower to fulfill its obligations under the Loan Agreement has occurred since the date of the most recent financial statements, submitted to you by the Company.

The Company agrees to notify you promptly before the funding of the Advance if any of the matters to which I have certified above shall not be true and correct on the Funding Date.

Very truly yours,

FLUIDIGM CORPORATION

By:

Name:

Title:

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT E

INCUMBENCY CERTIFICATE

The undersigned, William Smith, hereby certifies that:

1. He/She is the duly elected and acting General Counsel and Vice President of Legal Affairs of **FLUIDIGM CORPORATION** , a California corporation (the "*Company*").

2. That on the date hereof, each person listed below holds the office in the Company indicated opposite his or her name and that the signature appearing thereon is the genuine signature of each such person:

NAME	OFFICE	SIGNATURE
Gajus Worthington	President and CEO	
William Smith	General Counsel and Vice President of Legal Affairs	

3. Attached hereto as ***Exhibit A*** is a true and correct copy of the Articles of Incorporation of the Company, as amended, as in effect as of the date hereof.

4. Attached hereto as ***Exhibit B*** is a true and correct copy of the Bylaws of the Company, as amended, as in effect as of the date hereof.

5. Attached hereto as ***Exhibit C*** is a copy of the resolutions of the Board of Directors of the Company authorizing and approving the Company's execution, delivery and performance of a loan facility with Lighthouse Capital Partners V, L.P.

IN WITNESS WHEREOF, the undersigned has executed this Incumbency Certificate on March 29, 2005.

FLUIDIGM CORPORATION

By:

Name: William Smith

Title: General Counsel and Vice President of Legal Affairs

I, the President and CEO of the Company, do hereby certify that William Smith is the duly qualified, elected and acting General Counsel and Vice President of Legal Affairs of the Company and that the above signature is his or her genuine signature.

IN WITNESS WHEREOF, the undersigned has executed and delivered this Officer's Certificate on March 29, 2005.

FLUIDIGM CORPORATION

By:

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Name: Gajus Worthington

Title: President and CEO

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT F

OFFICER'S CERTIFICATE

The undersigned, to induce **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** *("Lender")*, to extend or continue financial accommodations to **FLUIDIGM CORPORATION** , a California corporation (the *"Borrower")* pursuant to the terms of that certain Loan and Security Agreement dated March 29, 2005 (the *"Loan Agreement")*, hereby certifies that on the date hereof:

1. I am the duly elected and acting _____ of Borrower.

2. I am a Responsible Officer as that term is defined in the Loan Agreement.

3. The information submitted herewith complies with **Sections 5.7** and **6.2** of the Loan Agreement.

4. The financial statements delivered herewith fairly present the financial condition of Borrower

5. Borrower is currently able to meet its obligations as they come due.

6. I understand that Lender is relying upon the truthfulness, accuracy and completeness hereof in connection with the Loan Agreement.

7. I will advise you if it comes to my attention that, as of the date hereof, the information submitted herewith was not in fact true, correct and complete.

IN WITNESS WHEREOF, the undersigned has executed this Officer's Certificate on _____.

FLUIDIGM CORPORATION

By:

Name:

Title:

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EXHIBIT G

AUTHORIZATION FOR AUTOMATIC PAYMENT

The undersigned **FLUIDIGM CORPORATION** ("*Borrower*") authorizes **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** and any and all affiliated funds (collectively, "*Lender*") and the bank / financial institution ("*Bank*") named below to initiate variable debit and/or credit entries to Borrower's deposit, checking or savings accounts as designated below and to cause funds transfers to an account of Lender as payment of any and all amounts due under the Loan and Security Agreement between Borrower and Lender dated March _____, 2005 (the "*Loan Agreement*").

1. Lender is hereby authorized to initiate variable debit and/or credit transactions and resulting funds transfers in Borrower's designated accounts with respect to amounts calculated by Lender to be due and owing to Lender by Borrower periodically under the Loan Agreement. Borrower consents to all such debit and/or credit transactions and resulting funds transfers and hereby authorizes Lender to take all such actions as may be required by Bank with respect to such transactions. Borrower acknowledges and agrees that such credit and/or debit entries may be made in amounts due under the Loan Agreement in order to cause timely payments as required by the terms of the Loan Agreement.

2. Borrower hereby authorizes Lender to release to Bank all information concerning Borrower that may be necessary or desirable for Bank to investigate or recover any erroneous funds transfers that may occur.

3. Borrower acknowledges and agrees that all such debit and/or credit transactions and funds transfers are intended to be made through an Automated Clearing House system and in compliance with the NACHA Rules and in compliance with Bank's security procedures.

4. Borrower represents and warrants that the account information set forth below is accurate and complete and that each of the account(s) set forth below is a business account maintained in Borrower's name and for Borrower's account.

This Consent shall be effective as of March 29, 2005 and shall remain in effect until the Loan Agreement has been terminated. Any cancellation by Borrower of this consent shall (i) be made in writing and (ii) delivered to Bank and Lender in such time as to afford Bank and Lender a reasonable opportunity to act on said cancellation.

Wells Fargo Bank
(Name of Borrower's Bank)

420 Montgomery St.	San Francisco	CA	94104
(Address of Bank)	(City)	(State)	(Zip Code)

Bank Routing Number [***]
(between these symbols " /:" ":/" on bottom left of check)

Account Number: ____[***]____(checking /deposit /savings)____*(circle one)*

Copy of a voided check is attached to this form

Borrower Name: **FLUIDIGM CORPORATION**

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Borrower Address: 7100 Shoreline Court
South San Francisco, CA 94080

Authorized by: _____
Its:

Date authorized: _____

Internal ACH Authorizations from Lender:

Approved by:_____ Date: _____

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EXHIBIT H

NEGATIVE PLEDGE AGREEMENT

THIS NEGATIVE PLEDGE AGREEMENT is made as of March 29, 2005, by and between **FLUIDIGM CORPORATION** *("Borrower")* and **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** *("Lender").*

In consideration of the Loan and Security Agreement between the parties of proximate date herewith (the *"Loan Agreement"),* Borrower agrees as follows:

Except as otherwise permitted in the Loan Agreement, Borrower shall not sell, transfer, assign, mortgage, pledge, lease, grant a security interest in, or encumber any of Borrower's owned intellectual property, including, without limitation, the following:

(a) Any and all copyright rights, copyright applications, copyright registration and like protection in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held (collectively, the "*Copyrights*");

(b) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;

(c) Any and all design rights which may be available to Borrower now or hereafter existing, created, acquired or held;

(d) All patents, patent applications and like protections, including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including, without limitation, the patents and patent applications (collectively, the "*Patents*");

(e) Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks (collectively, the "*Trademarks*");

(f) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for an collect such damages for said use or infringement of the intellectual property rights identified above;

(g) Any and all licenses or other rights to use any of the Copyrights, Patents or Trademarks and all license fees and royalties arising from such use to the extent permitted by such license or rights

(h) Any and all amendments, extensions, renewals and extensions of any of the Copyrights, Patents or Trademarks; and

(i) Any and all proceeds and products of the foregoing, including, without limitation, all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

It shall be an Event of Default under the Loan Agreement if there is a breach of any term of this Negative Pledge Agreement. Borrower agrees to properly execute all documents reasonably required by Lender in order to fulfill the intent and purposes hereof.

FLUIDIGM CORPORATION **LIGHTHOUSE CAPITAL PARTNERS V, L.P.**

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

By: _____

Name:

Title:

By: **LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C** ., its general partner

By:

Name:

Title:

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EXHIBIT I

CONTROL AGREEMENT

[In form and substance acceptable to Lender in its reasonable discretion]

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RESTRICTED ACCOUNT AGREEMENT

(ACCOUNT RESTRICTED AFTER INSTRUCTIONS — Standing Wire Transfers)

This **Restricted Account Agreement** (the "Agreement"), dated as of the date specified at the end of this Agreement, is entered into among **Fluidigm Corporation** ("Company"), **Lighthouse Capital Partners V, L.P.** ("Secured Party") and the Wells Fargo Bank identified in the signature block at the end of this Agreement ("Bank"), and sets forth the rights of Secured Party and the obligations of Bank with respect to the deposit account(s) of Company at Bank identified at the end of this Agreement as the "Restricted Account(s)". As used in this Agreement, the term "Restricted Account" refers, individually and collectively, to each such deposit account.

1. **Secured Party's Interest in Restricted Account.** Secured Party represents that it is either (i) a lender who has extended credit to Company and has been granted a security interest in the Restricted Account or (ii) such a lender and the agent for a group of such lenders (the "Lenders"). Company hereby confirms, and Bank hereby acknowledges, the security interest granted by Company to Secured Party in all of Company's right, title and interest in and to the Restricted Account and all sums now or hereafter on deposit in or payable or withdrawable from the Restricted Account (the "Account Funds"). Except as specifically provided otherwise in this Agreement, Company has given Secured Party complete control over the Account Funds. Secured Party hereby appoints Bank as agent for Secured Party only for the purpose of perfecting the security interest of Secured Party in the Account Funds while they are in the Restricted Account. Company and Secured Party would like to use the Restricted Account Service of Bank described in this Agreement (the "Service") to further the arrangements between Secured Party and Company regarding the Restricted Account and the Account Funds.

2. **Access to Restricted Account.** Secured Party agrees that Company will be allowed access to the Account Funds until Bank receives written instructions from Secured Party directing that Company no longer have access to any Account Funds (the "Instructions"). Company agrees that the Account Funds should be paid to Secured Party after Bank receives the Instructions, and hereby irrevocably authorizes Bank to comply with the Instructions even if Company objects in any way to the Instructions. Company further agrees that after Bank receives the Instructions, Company will not have access to any Account Funds.

3. **Balance Reports.** Bank agrees, at the telephone request of Secured Party on any Business Day (a day on which Bank is open to conduct its regular banking business, other than a Saturday, Sunday or public holiday), to make available to Secured Party a report ("Balance Report") showing the opening available balance in the Restricted Account as of the beginning of such Business Day, either on-line or by facsimile transmission, at Bank's option. Company expressly consents to this transmission of information. Secured Party and Company understand and agree that the opening available balance in the Restricted Account at the beginning of any Business Day will be determined after deducting from the Restricted Account the face amount of all Returned Items (as defined in Section 8 of this Agreement).

4. **Transfers to Secured Party.** Bank agrees that on each Business Day after it receives the Instructions it will transfer to the Secured Party's account specified at the end of this Agreement

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with the bank specified at the end of this Agreement (the "Secured Party Account") the full amount of the opening available balance in the Restricted Account at the beginning of such Business Day. Bank will use the Fedwire system to make each funds transfer unless for any reason the Fedwire system is unavailable, in which case Bank will determine the funds transfer system to be used in making each funds transfer and the means by which each transfer will be made. Bank, Secured Party and Company each agree that Bank will comply with instructions given to Bank by Secured Party directing disposition of funds in the Restricted Account without further consent by Company, subject otherwise to the terms of this Agreement and Bank's standard policies, procedures and documentation in effect from time to time governing the type of disposition requested. Company authorizes all such transfers. Except as otherwise required by law, Bank will not agree with any third party to comply with instructions for disposition of funds in the Restricted Account originated by such third party.

5. **Delays in Making Funds Transfers.** Secured Party and Company understand that a funds transfer may be delayed or not made if (a) the transfer would cause Bank to exceed any limitation on its intra-day net funds position established in accordance with Federal Reserve or other regulatory guidelines or to violate any other Federal Reserve or other regulatory risk control program, or (b) the funds transfer would otherwise cause Bank to violate any applicable law or regulation. If a funds transfer cannot be made or will be delayed, Bank will notify Secured Party by telephone.

6. **Reliance on Identifying Numbers.** If Secured Party indicates a name and an identifying number for the bank of the person or entity to receive funds transfers out of the Restricted Account, Secured Party and Company understand and agree that Bank may rely on the number Secured Party indicates even if that number identifies a bank different from the bank Secured Party named. If Secured Party indicates a name and an account number for the person or entity to receive funds transfers out of the Restricted Account, Secured Party and Company understand and agree that Bank may rely on the account number Secured Party indicates even if that account number is not the account number for the person or entity who is to receive the transfers.

7. **Reporting Errors in Transfers.** If Secured Party or Company learns of any error in a funds transfer or any unauthorized funds transfer, then the party learning of such error or unauthorized transfer (the "Informed Party") must notify Bank as soon as possible by telephone at (800) AT-WELLS (which is a recorded line), and provide written confirmation to Bank of such telephonic notice within two Business Days at the address given for Bank on the signature page of this Agreement. In no case may such notice to Bank by an Informed Party be made more than fourteen (14) calendar days after such Informed Party learns of the erroneous or unauthorized transfer. If a funds transfer is made in error and Bank suffers a loss because an Informed Party breached its agreement to notify Bank of such error within the time limits specified in this Section 7, then such Informed Party shall reimburse Bank for the loss promptly upon demand by Bank; provided, however, that in the event both Secured Party and Company breach this notification requirement, Secured Party shall not be obligated to reimburse Bank for the loss unless Company fails to satisfy Bank's demand for reimbursement within fifteen (15) calendar days after demand is made on Company.

8. **Returned Item Amounts.** Secured Party and Company understand and agree that the face amount ("Returned Item Amount") of each Returned Item will be paid by Bank debiting the Restricted Account, without prior notice to Secured Party or Company. As used in this Agreement, the term "Returned Item" means (i) any item deposited to the Restricted Account and returned unpaid, whether for insufficient funds or for any other reason, and without regard to the timeliness of such return or the occurrence or timeliness of any drawee's notice of non-payment; (ii) any item subject to a claim against Bank of breach of transfer or presentment warranty under the Uniform Commercial Code, as adopted in the applicable state; (iii) any automated clearing house ("ACH") entry credited to the Restricted Account and returned unpaid

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or subject to an adjustment entry under applicable clearing house rules, whether for insufficient funds or for any other reason, and without regard to the timeliness of such return or adjustment; (iv) any credit to the Restricted Account from a merchant card transaction, against which a contractual demand for chargeback has been made; and (v) any credit to the Restricted Account made in error. Company agrees to pay all Returned Item Amounts immediately on demand, without setoff or counterclaim, to the extent there are not sufficient funds in the Restricted Account to cover the Returned Item Amounts on the day they are to be debited from the Restricted Account. Secured Party agrees to pay all Returned Item Amounts within thirty (30) calendar days after demand, without setoff or counterclaim, to the extent the Returned Item Amounts are not paid in full by Company within fifteen (15) calendar days after demand on Company by Bank, and to the extent Secured Party received proceeds from the corresponding Returned Items.

9. **Bank Fees.** Company agrees to pay all Bank's fees and charges for the maintenance and administration of the Restricted Account and for the treasury management and other account services provided with respect to the Restricted Account (collectively "Bank Fees"), including, but not limited to, the fees for (a) the Balance Reports provided on the Restricted Account, (b) the wire transfer services received with respect to the Restricted Account, (c) Returned Items, (d) funds advanced to cover overdrafts in the Restricted Account (but without Bank being in any way obligated to make any such advances), and (e) duplicate bank statements on the Restricted Account. Before Bank receives the Instructions, the Bank Fees will be paid by Bank debiting the Restricted Account, and after Bank receives the Instructions the Bank fees will be paid by Bank debiting one or more of the demand deposit operating accounts of Company at Bank specified at the end of this Agreement (the "Operating Accounts"). All such debits will be made on the Business Day that the Bank Fees are due without notice to Secured Party or Company. If there are not sufficient funds in the Restricted Account, or after Bank receives the Instructions, the Operating Accounts, to cover fully the Bank Fees on the Business Day they are debited from the Restricted Account or the Operating Accounts, or if no Operating Accounts are indicated at the end of this Agreement, such shortfall or the amount of such Bank Fees will be paid by Company sending Bank a check in the amount of such shortfall or such Bank Fees, without setoff or counterclaim, within fifteen (15) calendar days after demand of Bank. After Bank receives the Instructions, Secured Party agrees to pay the Bank Fees within thirty (30) calendar days after demand, without setoff or counterclaim, to the extent such Bank Fees are not paid in full by Company by check within fifteen (15) calendar days after demand on Company by Bank. Bank may, in its discretion, change the Bank Fees upon thirty (30) calendar days prior written notice to Company and Secured Party.

10. **Account Documentation.** Secured Party and Company agree that, except as specifically provided in this Agreement, the Restricted Account will be subject to, and Bank's operation of the Restricted Account will be in accordance with, the terms and provisions of Bank's deposit account agreement governing the Restricted Account ("Account Agreement"), a copy of which Company and Secured Party acknowledge having received.

11. **Bank Statements.** After Bank receives the Instructions, Bank will, if so indicated on the signature page of this Agreement, send to Secured Party by United States mail, at the address indicated for Secured Party after its signature to this Agreement, duplicate copies of all bank statements on the Restricted Account which are sent to Company. Company and/or Secured Party will have thirty (30) calendar days after receipt of a bank statement to notify Bank of an error in such statement. Bank's liability for such errors is limited as provided in the "Limitation of Liability" section of this Agreement.

12. **Partial Subordination of Bank's Rights.** Bank hereby subordinates to the security interest of Secured Party in the Restricted Account (i) any security interest which Bank may have or acquire in the Restricted Account, and (ii) any right which Bank may have or acquire to set off or otherwise apply any Account Funds against the payment of any indebtedness from time to time

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owing to Bank from Company, except for debits to the Restricted Account permitted under this Agreement for the payment of Returned Item Amounts or Bank Fees.

13. **Bankruptcy Notice; Effect of Filing.** If Bank at any time receives notice of the commencement of a bankruptcy case or other insolvency or liquidation proceeding by or against Company (a "Bankruptcy Notice"), Bank will continue to comply with its obligations under this Agreement, except to the extent that any action required of Bank under this Agreement is prohibited under applicable bankruptcy laws or regulations or is stayed pursuant to the automatic stay imposed under the United States Bankruptcy Code or by order of any court or agency. With respect to any obligation of Secured Party hereunder which requires prior demand upon Company, the commencement of a bankruptcy case or other insolvency or liquidation proceeding by or against Company shall automatically eliminate the necessity of such demand upon Company by Bank, and shall immediately entitle Bank to make demand on Secured Party with the same effect as if demand had been made upon Company and the time for Company's performance had expired.

14. **Legal Process, Legal Notices and Court Orders.** Bank will comply with any legal process, legal notice or court order it receives if Bank determines in its sole discretion that the legal process, legal notice or court order is legally binding on it.

15. **Indemnification for Following Instructions.** Secured Party and Company each agree that, notwithstanding any other provision of this Agreement, except to the extent caused by Bank's gross negligence or willful misconduct Bank will not be liable to Secured Party or Company for any losses, liabilities, damages, claims (including, but not limited to, third party claims), demands, obligations, actions, suits, judgments, penalties, costs or expenses, including, but not limited to, attorneys' fees, (collectively, "Losses and Liabilities") suffered or incurred by Secured Party or Company as a result of or in connection with, (a) Bank complying with any binding legal process, legal notice or court order referred to in Section 14 of this Agreement, (b) Bank following any instruction or request of Secured Party, or (c) Bank complying with its obligations under this Agreement. Further, Company, and to the extent not paid by Company within fifteen (15) calendar days after demand, Secured Party, will indemnify Bank against any Losses and Liabilities Bank may suffer or incur as a result of or in connection with any of the circumstances referred to in clauses (a) through (c) of the preceding sentence.

16. **No Representations or Warranties of Bank.** Bank agrees to perform its obligations under this Agreement in a manner consistent with the quality provided when Bank performs similar services for its own account. However, Bank will not be responsible for the errors, acts or omissions of others, such as communications carriers, correspondents or clearinghouses through which Bank may perform its obligations under this Agreement or receive or transmit information in performing its obligations under this Agreement. Secured Party and Company also understand that Bank will not be responsible for any loss, liability or delay caused by wars, failures in communications networks, labor disputes, legal constraints, fires, power surges or failures, earthquakes, civil disturbances or other events beyond Bank's control. **BANK MAKES NO EXPRESS OR IMPLIED REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE SERVICE OTHER THAN THOSE EXPRESSLY SET FORTH IN THIS AGREEMENT.**

17. **Limitation of Liability.** In the event that Secured Party, Company or Bank suffers or incurs any Losses and Liabilities as a result of, or in connection with, its or any other party's performance or failure to perform its obligations under this Agreement, the affected parties shall negotiate in good faith in an effort to reach a mutually satisfactory allocation of such Losses and Liabilities, it being understood that Bank will not be responsible for any Losses and Liabilities due to any cause other than its own negligence or breach of this Agreement, in which case its liability to Secured Party and Company shall, unless otherwise provided by any law which cannot be

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varied by contract, be limited to direct money damages in an amount not to exceed ten (10) times all the Bank Fees charged or incurred during the calendar month immediately preceding the calendar month in which such Losses and Liabilities occurred (or, if no Bank Fees were charged or incurred in the preceding month, the Bank Fees charged or incurred in the month in which the Losses and Liabilities occurred). Company will indemnify Bank against all Losses and Liabilities suffered or incurred by Bank as a result of third party claims; provided, however, that to the extent such Losses and Liabilities are directly caused by Bank's negligence or breach of this Agreement such indemnity will only apply to those Losses and Liabilities which exceed the liability limitation specified in the preceding sentence. The limitation of Bank's liability and the indemnification by Company set out above will not be applicable to the extent any Losses and Liabilities of any party to this Agreement are directly caused by Bank's gross negligence or willful misconduct. **IN NO EVENT WILL BANK BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, INDIRECT OR PUNITIVE DAMAGES, WHETHER ANY CLAIM IS BASED ON CONTRACT OR TORT, WHETHER THE LIKELIHOOD OF SUCH DAMAGES WAS KNOWN TO BANK AND REGARDLESS OF THE FORM OF THE CLAIM OR ACTION, INCLUDING, BUT NOT LIMITED TO, ANY CLAIM OR ACTION ALLEGING GROSS NEGLIGENCE, WILLFUL MISCONDUCT, FAILURE TO EXERCISE REASONABLE CARE OR FAILURE TO ACT IN GOOD FAITH.** Any action against Bank by Company or Secured Party under or related to this Agreement must be brought within twelve months after the cause of action accrues.

18. **Termination.** This Agreement and the Service may be terminated by Secured Party or Bank at any time by either of them giving thirty (30) calendar days prior written notice of such termination to the other two parties to this Agreement at their contact addresses specified after their signatures to this Agreement; provided, however, that this Agreement and the Service may be terminated immediately upon written notice from Bank to Company and Secured Party should Secured Party fail to make any payment when due to Bank from Secured Party under the terms of this Agreement. Secured Party and Company agree that the Restricted Account may be closed by Bank as provided in the Account Agreement. Company's and Secured Party's obligation to report errors in funds transfers and bank statements and to pay the Bank Fees, as well as the indemnifications made, and the limitations on the liability of Bank accepted, by Company and Secured Party under this Agreement will continue after the termination of this Agreement and/or the closure of the Restricted Account with respect to all the circumstances to which they are applicable existing or occurring before such termination or closure, and any liability of any party to this Agreement, as determined under the provisions of this Agreement, with respect to acts or omissions of such party prior to such termination or closure will also survive such termination or closure. Upon any termination of this Agreement and the Service or closure of the Restricted Account all collected and available balances in the Restricted Account on the date of such termination or closure will be transferred to Secured Party as requested by Secured Party in writing to Bank.

19. **Modifications, Amendments, and Waivers.** This Agreement may not be modified or amended, or any provision thereof waived, except in a writing signed by all the parties to this Agreement; provided, however, that the Bank Fees may be changed after thirty (30) calendar days prior written notice to Company and Secured Party.

20. **Notices.** All notices from one party to another shall be in writing, or be made by a telecommunications device capable of creating a written record, shall be delivered to Company, Secured Party and/or Bank at their contact addresses specified after their signatures to this Agreement, or any other address of any party notified to the other parties in writing, and shall be effective upon receipt. Any notice sent by one party to this Agreement to another party shall also be sent to the third party to this Agreement. Bank is authorized by Company and Secured Party to act on any instructions or notices received by Bank if (a) such instructions or notices

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purport to be made in the name of Secured Party, (b) Bank reasonably believes that they are so made, and (c) they do not conflict with the terms of this Agreement as such terms may be amended from time to time, unless such conflicting instructions or notices are supported by a court order.

21. **Successors and Assigns.** Neither Company nor Secured Party may assign or transfer its rights or obligations under this Agreement to any person or entity without the prior written consent of Bank, which consent will not be unreasonably withheld. Bank may not assign its rights or obligations under this Agreement to any person or entity without the prior written consent of Secured Party, which consent will not be unreasonably withheld; provided, however, that no such consent will be required if the assignee is a bank affiliate of Bank.

22. **Governing Law.** Company and Secured Party understand that Bank's provision of the Service under this Agreement is subject to federal laws and regulations. To the extent that such federal laws and regulations are not applicable this Agreement shall be governed by and be construed in accordance with the laws of the state in which the office of Bank that maintains the Restricted Account is located, without regard to conflict of laws principles.

23. **Severability.** To the extent that this Agreement or the Service to be provided under this Agreement are inconsistent with, or prohibited or unenforceable under, any applicable law or regulation, they will be deemed ineffective only to the extent of such prohibition or unenforceability and be deemed modified and applied in a manner consistent with such law or regulation. Any provision of this Agreement which is deemed unenforceable or invalid in any jurisdiction shall not affect the enforceability or validity of the remaining provisions of this Agreement or the same provision in any other jurisdiction.

24. **Usury.** It is never the intention of Bank to violate any applicable usury or interest rate laws. Bank does not agree to, or intend to contract for, charge, collect, take, reserve or receive (collectively, "charge or collect") any amount in the nature of interest or in the nature of a fee, penalty or other charge which would in any way or event cause Bank to charge or collect more than the maximum Bank would be permitted to charge or collect by any applicable federal or state law. Any such excess interest or unauthorized fee shall, notwithstanding anything stated to the contrary in this Agreement, be applied first to reduce the amount owed, if any, and then any excess amounts will be refunded.

25. **Counterparts.** This Agreement may be executed in any number of counterparts each of which shall be an original with the same effect as if the signatures thereto and hereto were upon the same instrument.

26. **Entire Agreement.** This Agreement, together with the Account Agreement, contains the entire and only agreement among all the parties to this Agreement and between Bank and Company, and Bank and Secured Party, with respect to (a) the Service, (b) the interest of Secured Party and the Lenders in the Account Funds and the Restricted Account, and (c) Bank's obligations to Secured Party and the Lenders in connection with the Account Funds and the Restricted Account.

This Agreement has been signed by the duly authorized officers or representatives of Company, Secured Party and Bank on the date specified below.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Date: March 29, 2005

Restricted Account Number(s): **[***]**
Operating Account Number(s): **[***]**
Secured Party Account Number: **[***]**

Bank of Secured Party Account: **Comerica Bank**

Secured Party is to be sent duplicate Bank Statements.

[Company] FLUIDIGM CORPORATION

By:
Name: **Gajus Worthington**
Title: **CEO**

Address For All Notices:

Fluidigm Corporation
Attn: James Neesen
7100 Shoreline Court

[Secured Party] LIGHTHOUSE CAPITAL PARTNERS V, L.P.

BY: LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C. ITS GENERAL PARTNER

By:
Name: **Thomas Conneely**
Title: **Vice President**

Address For All Notices:

Lighthouse Capital Partners V, L.P.
500 Drakes Landing Road
Greenbrae, CA 94904
Attn: Contracts Administration

WELLS FARGO BANK , N.A.

By: _____
Name: **Scott M. Van Gorder**
Title: **Vice President, Senior Relationship Manager**

Address For All Notices:

420 Montgomery Street, 9th Floor
MAC A0101-096
San Francisco, CA 94108

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Confidential Treatment Requested by Fluidigm Corporation

March 29, 2005

Morgan Stanley & Co. Incorporated (the "Broker")
555 California Street 14th Floor
San Francisco, CA 94104

Re: **Notice of Pledge and Security**

Gentlemen:

Please be advised that the undersigned, Fluidigm Corporation ("Pledgor"), has pledged a security interest in Account No. [***] (the "Account") held by Broker, as securities intermediary, and in all of the securities, proceeds, cash or other assets now or hereafter held in the Account (collectively, the "Collateral"), to Lighthouse Capital Partners V, L.P. ("Pledgee") pursuant to the terms and provisions of a certain Loan and Security Agreement (the "Agreement"), dated March 29, 2005.

Broker, Pledgor and Pledgee, by signing this letter, hereby agree as follows:

a) The Account shall be retitled "Fluidigm Corporation — Pledgor/ Lighthouse Capital – Pledgee";

b) Pledgee has a security interest in the Collateral and is authorized to instruct the Broker with regard to the Account without further consent needed by Pledgor;

c) Broker is hereby notified of Pledgee's security interest, and agrees to comply with all instructions and entitlement orders of Pledgee with regard to the Account. Broker shall not comply with instructions and entitlement orders with respect to the Collateral or the Account that are originated by the Pledgor except as described in Paragraph D below. Broker is also hereby authorized and agrees to send duplicate copies of any and all statements and confirmations, as well as any other appropriate correspondence, relating to the Account directly to the Pledgee at the address indicated below, or to such other address as Pledgee may designate in writing. This pledge will remain in full force and effect until Pledgee notifies Broker in writing to the contrary;

d) Pledgee hereby instructs Broker that until further instruction in writing from an Authorized Officer of Pledgee (as defined below) that Pledgee is assuming exclusive control over the Account ("Notice of Exclusive Control"), the Broker shall comply with directions of Pledgor with respect to any transactions, including withdrawals, in the Account. Notwithstanding anything contained herein, upon receipt of a Notice of Exclusive Control (it being understood that Broker shall have no duty or obligation whatsoever to investigate or determine whether the Notice of Exclusive Control was

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rightfully or legally issued), Broker shall only follow the directions and instructions of Pledgee with regard to the Account. In that case, if Pledgee so requests, Broker will proceed to liquidate the assets of the Account in accordance with Pledgee's instructions and to deliver the proceeds to Pledgee.

For purposes of this Agreement, "Authorized Officer of Pledgee" shall refer to any one of the following individuals: Richard Stubblefield and Thomas Conneely. If Pledgee finds it necessary to designate a replacement for any of the designated Authorized Officers of Pledgee, written notice of replacement shall be given to Broker, which notice shall be signed by the President, an Executive Vice President, a Senior Vice President, or such other officer of Pledgee as Broker may approve. However, Broker shall be entitled to rely on any notice it receives from someone whom it reasonably believes is an Authorized Officer of Pledgee;

e) Broker shall have no obligation to monitor the Account for any purpose in connection with the pledge granted hereunder. The Pledgee accepts and acknowledges full responsibility for reviewing daily confirmations and monthly statements to ensure that it is adequately secured;

f) Pledgor and Pledgee hereby agree to indemnify and hold harmless Broker, its affiliates, officers, and employees from and against any and all claims, causes of actions, liabilities, lawsuits, demands, and/or damages, including, without limitation, any and all court costs and reasonable attorney's fees, that might result by reason of the actions of Broker under this Agreement. Broker shall not be responsible for any losses, claims, damages, liabilities and expenses incurred by Pledgor or Pledgee, except to the extent that such losses, claims, damages, liabilities or expenses arise out of the bad faith, gross negligence, or criminal acts or omissions on the part of Broker;

g) Broker may terminate this Agreement at any time by canceling the Account and transferring all funds and securities in the Account to Pledgee;

h) As of the date hereof, the Collateral has not been paid to or withdrawn by the Pledgor; Broker is not in receipt of any notice of withdrawal or redemption with regard to the Collateral or notice not to renew the Account, and Broker has not given any notice that the Account will not be renewed or extended, as the case may be;

i) Broker's records indicate that the value of the Collateral, as of the date hereof, is approximately [***].

j) Broker subordinates any right of offset Broker may now or hereafter have against the Collateral for any indebtedness now or hereafter owing to Broker by the Pledgors to the security interest of Pledgee; provided that Broker shall continue to have a first perfected security interest in the Collateral with respect to any charges incurred in connection with the operation of the Account, including, but not limited to, fees, commissions and any costs related to unsettled securities transactions.

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k) This Agreement shall be governed by the law of the State of New York, excluding its conflict of law rules. The parties hereby agree that (i) the "securities intermediary's jurisdiction" with respect to the Account and the Collateral is New York and (ii) the parties shall not agree with any other person that such securities intermediary's jurisdiction is any jurisdiction other than New York.

Very truly yours,
FLUIDIGM CORPORATION

By: James Neeson
Title: Controller

Read and Agreed to:
MORGAN STANLEY & CO. INCORPORATED

By
Name:
Title:

LIGHTHOUSE CAPITAL PARTNERS V, L.P.

By: Lighthouse Management Partners V, L.L.C.
its general partner

By _____
Name: Thomas Conneely
Title: Vice President
Address: 500 Drakes Landing Road
Greenbrae, CA 94904

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SUBORDINATION AGREEMENT

This SUBORDINATION AGREEMENT (this "Agreement"), dated as of March 29, 2005, is between, on the one hand, each undersigned holder (each a "Holder" and collectively the "Holders") of Convertible Promissory Notes issued pursuant to those certain Convertible Note Purchase Agreement dated December 18, 2003, as amended from time to time (each a "Note" and collectively the "Notes") issued by **FLUIDIGM CORPORATION,** a California corporation ("Company"), and, on the other hand, **LIGHTHOUSE CAPITAL PARTNERS V, L.P.,** a Delaware limited partnership ("LCP"), lender under that certain Loan and Security Agreement No. 4561, dated March 29, 2005 (the "Loan Agreement") with Company (all obligations of payment and performance due or to become due pursuant to the Obligations or the Loan Documents as those terms are defined therein, as the same may be amended from time to time, are the "LCP Obligations"), with reference to the following:

WHEREAS, in order to induce LCP to enter into the Loan Agreement, the Holders agree to enter into this Agreement;

NOW, THEREFORE, in consideration of the mutual promises herein contained, the parties hereby agree as follows:

1. Subordination. Each Holder agrees that it shall not receive any payment of any amounts on account of the Notes until the LCP Obligations have been paid and performed in full. Regardless of (i) any agreement of any Holder or LCP with Company, (ii) the time, place, manner or order of attachment, perfection, or the filing of UCC-1 filings or other documents, or (iii) the giving or failure to give notice, each Holder does hereby subordinate payment by Company on its Notes to the full and final payment to LCP of the LCP Obligations. Each Holder agrees that all payments and the proceeds received by Holders on account of the Notes shall be held by them in trust for LCP for the payment of the LCP Obligations, and turned over to LCP in kind upon receipt of notice from LCP that Company has failed to pay LCP any of the LCP Obligations. Holders hereby agree they have no security interest in any property of the Company.

Notwithstanding anything in this Agreement, (i) in the event the Convertible Note, dated as of December 18, 2003 (the "Initial EDB Note"), issued by Company to Biomedical Sciences Investment Fund Pte Ltd ("BMSIF") has not been converted according to the terms set forth in Section 2 of such Initial EDB Note by the Payment Date (as defined in such Initial EDB Note), BMSIF may receive payment by the Company in an amount not to exceed 50% of the principal amount outstanding under such Initial EDB Note, and (ii) each Holder may convert any Note into capital stock of the Company and accept cash in lieu of fractional shares in connection with any such conversion. Upon conversion of any Note into capital stock of the Company and acceptance of cash in lieu of fractional shares in connection with any such conversion, this Agreement shall terminate with respect to such Note and any proceeds received by a Holder in connection with the conversion of such Note.

2. Bankruptcy. (Subject to paragraph (1) above), Each Holder agrees that upon any

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distribution of assets or readjustment of indebtedness of Company, whether by liquidation, bankruptcy, assignment for the benefit of creditors, or otherwise, LCP shall receive payment in full on the LCP Obligations before Holder receives payment of any amounts due under the Notes and Holders shall pay over to LCP any amounts so received by them related to the Notes until the LCP Obligations are paid in full. In furtherance thereof, each Holder authorizes LCP to make and vote (without LCP being obligated to make or vote) any and all proofs of claim respecting the Notes in any such proceeding and to receive and collect all dividends or other payments thereupon; provided that LCP will pay over to Holders a pro rata distribution of amounts received by it in excess of that necessary for the full and final satisfaction of the LCP Obligations. Holders agree to execute such instruments of assignment and other documents as may be necessary to enforce such claims and collect such dividends or to otherwise carry out the intent and purpose hereof.

3. Representations. Each party hereto warrants and represents to the others that it has full power and authority to enter hereinto and to perform all obligations hereunder, that this Agreement is valid, binding and enforceable in accordance with its terms and that execution and performance hereof does not violate any agreement with any other person or entity. Each Holder represents and warrants that it (i) is the owner of the Notes, free and clear of the claims of any others, (ii) has not heretofore subordinated or assigned the Notes or its interest therein to any entity, (iii) will not transfer any Notes to any entity other than one which agrees to be bound hereby, and (iv) waives any rights to claim that the enforceability of this Agreement may be affected by any subsequent modification, release, extension, or change in LCP obligations.

4. No Third Party Beneficiaries. Company has no rights hereunder. This Agreement is made only for the benefit of Holders and LCP and their successors and assigns, and may not be relied upon by any other third party, including Company or any successor thereto or any judgment lien creditor thereof. Nothing herein shall constitute a commitment or agreement by either of LCP or Holder to provide funds to Company.

5. Miscellaneous. This Agreement: (i) may only be amended by a writing signed by LCP and the affected Holder; (ii) contains the entire agreement between Holders and LCP with respect to its subject matter, and all prior negotiations, documents and discussions are superseded hereby; (iii) shall be governed by the laws of the state of California; (iv) may be executed in counterparts delivered by telefacsimile, all of which, when taken together, shall constitute one and the same original document; and (v) may be attached to a Form UCC-1 and filed in the public records of any jurisdiction; and (vi) shall terminate upon the full, final and indefeasible payment and performance by Company to LCP of all LCP Obligations.

6. Waiver of Jury Trial. TO THE FULLEST EXTENT PERMITTED BY LAW, EACH OF THE PARTIES HERETO WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT. EACH PARTY FURTHER WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION IN WHICH A JURY TRIAL HAS BEEN WAIVED WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED.

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IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

LIGHTHOUSE CAPITAL PARTNERS V, L.P.
a Delaware limited partnership

by: Lighthouse Management Partners V, L.L.C.
its general partner

by: /s/ Thomas Conneely
Thomas Conneely
Vice President

500 Drakes Landing Road
Greenbrae, CA 94904
Attn: Contracts Administration
Tel: (415) 464-5900
Fax: (415) 925-3387

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

HOLDERS:

BIOMEDICAL SCIENCES INVESTMENT FUND PTD LTD

By: /s/ Lily Chan
Title: Director

20 Biopolis Way
#09-01 Centros
Singapore 138668
Attn: Lily Chan, PhD
Tel: 65-6395-7700
Fax: 65-6395-7796

INVUS, L.P.

By: Invus Advisors, LLC
Its general partner

By: _____
Title: _____

135 East 57th Street
New York, NY 10022
Attn: Phillipe J. Amouyal
Tel: (212) 371-1717
Fax: (212) 371-1829

Company hereby acknowledges and consents to the Agreement, promises to take all such action as may be necessary to fulfill its essential intent and purpose, agrees that failure to do so shall be an Event of Default under the LCP Obligations, and acknowledges that in the transactions referenced herein it has been advised to seek, and has selected, counsel of its own choosing, namely Wilson, Sonsini, Goodrich & Rosati of Palo Alto, California.

FLUIDIGM CORPORATION

By _____
Its _____

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

HOLDERS:

BIOMEDICAL SCIENCES INVESTMENT FUND PTD LTD

By:
Title:

20 Biopolis Way
#09-01 Centros
Singapore 138668
Attn: General Manager
Tel: 65-6395-7700
Fax: 65-6395-7796

INVUS, L.P.

By: Invus Advisors, LLC
Its general partner

By: /s/ Aflalo Guimaraes
Title: Managing Director

135 East 57th Street
New York, NY 10022
Attn: Phillipe J. Amouyal
Tel: (212) 371- 1717
Fax: (212) 371-1829

Company hereby acknowledges and consents to the Agreement, promises to take all such action as may be necessary to fulfill its essential intent and purpose, agrees that failure to do so shall be an Event of Default under the LCP Obligations, and acknowledges that in the transactions referenced herein it has been advised to seek, and has selected, counsel of its own choosing, namely Wilson, Sonsini, Goodrich & Rosati of Palo Alto, California.

FLUIDIGM CORPORATION

By _____
Its _____

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

HOLDERS:

BIOMEDICAL SCIENCES INVESTMENT FUND PTD LTD

By: _____
Title: _____

20 Biopolis Way
#09-01 Centros
Singapore 138668
Attn: General Manager
Tel: 65-6395-7700
Fax: 65-6395-7796

INVUS, L.P.

By: Invus Advisors, LLC
Its general partner

By: _____
Title: _____

135 East 57th Street
New York, NY 10022
Attn: Phillipe J. Amouyal
Tel: (212) 371-1717
Fax: (212) 371-1829

Company hereby acknowledges and consents to the Agreement, promises to take all such action as may be necessary to fulfill its essential intent and purpose, agrees that failure to do so shall be an Event of Default under the LCP Obligations, and acknowledges that in the transactions referenced herein it has been advised to seek, and has selected, counsel of its own choosing, namely Wilson, Sonsini, Goodrich & Rosati of Palo Alto, California.

FLUIDIGM CORPORATION

By /s/ Gajus Worthington
Its President & CEO

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

AMENDMENT NO. 01 (*"Amendment"*)
TO LOAN AND SECURITY AGREEMENT NO. 4561

Entered into as of August 4, 2006 by and between
LIGHTHOUSE CAPITAL PARTNERS V, L.P. *("Lender")* and **FLUIDIGM CORPORATION** *("Borrower").*

RECITALS

WHEREAS, Borrower and Lender have previously entered into that certain Loan and Security Agreement No. 4561 dated as of March 29, 2005 (the *"Loan and Security Agreement";* all initially capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Loan and Security Agreement), together with the other agreements and instruments entered into in connection therewith (collectively, the *"Loan Documents");* and

WHEREAS, Borrower and Lender each have agreed to amend the Loan Documents subject to Borrower's performance of the terms and conditions hereof; and

WHEREAS, as of August 31, 2006, Borrower and Lender mutually agree that the outstanding principal balance of the Loans is $11,093,832.04;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants herein contained, the parties hereby agree to modify the Loan Documents by entering into this Amendment and Borrower agrees to perform such other covenants and conditions as follows:

A) Loan and Security Agreement

(i) Definitions — The definition *of "Subordinated Indebtedness"*, shall be amended and restated to read as follows:

"Subordinated Indebtedness" means Indebtedness of Borrower to Singapore EDB (including its investment fund BioMedical Sciences Investment Fund Ptd Ltd) and Invus Group that is subordinated in both security and right of payment to the Obligations on terms and conditions reasonably satisfactory to Lender in an amount not to exceed $8,000,000.

B) Secured Term Promissory Note

(i) Definitions — The following definitions shall be added to the Notes, and to the extent these terms are already defined in the Loan Documents, they shall be deleted in their entirety and replaced with the following:

"*Final Payment"* means 11.25% of the Advance.

"*Basic Rate"* means a variable *per annum* rate of interest equal to the Index plus the Interest Margin which shall be subject to adjustment as provided herein. On and after March 1, 2006 through and including August 31, 2006, the Basic Rate shall be fixed at 10.00%. On and after September 1, 2006, the Basic Rate shall be fixed at 9.75%.

"*Repayment Period"* means the period beginning on the Loan Commencement Date and continuing for 48 calendar months.

C) Additional Terms and Conditions

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1. Repayment. Notwithstanding anything contained in any Note issued in connection with the Loan and Security Agreement, Section 1 of each such Note shall be superseded by the following payment terms: for and on account of all of the Notes, from March 1, 2006 through and including August 31, 2006, Borrower will pay Lender $416,006.71 per month. On and after September 1, 2006 through February 28, 2010, Borrower shall pay Lender $310,305.95 per month. In addition to all other amounts due or to become due hereunder, the Final Payment is due on the earliest to occur of the Maturity Date or March 1, 2009.
2. Restructure Fee. In addition to all other amounts due or to become due hereunder, on the earliest to occur of (i) the Maturity Date; (ii) the date of prepayment of all of the Notes, or (ii) March 1, 2009, Borrower shall pay to Lender a restructure fee in the amount of $150,000, in cash.
3. Expenses. Borrower shall pay reasonable fees and expenses incurred by Lender's legal counsel in connection with the preparation and negotiation of documentation related to this Amendment. Such restructure expenses are due and payable when billed.

D) Acknowledgments; Representations and Warranties. Borrower warrants and represents to Lender, as a material inducement to Lender's entering hereinto, as follows:

a) No Further Funding Obligations. Lender has no obligations to make further Advances to Borrower.

b) No Waivers. Lender has made no separate oral or written waiver of any existing or future Default or Event of Default by Borrower under any Loan Document.

c) No Set-Off. Borrower has no claims or rights of set-off against Lender of any kind under any Loan Document or otherwise. Borrower has no defenses to payments of any amounts owed to Lender as the same become due and payable.

d) Representations and Warranties of Borrower. The representations and warranties contained in the Loan Agreement are true and complete in all material respects as of the date hereof, except with respect to any such representation or warranty which speak only as of a specific date prior to the date hereof. Borrower warrants and represents that no Events of Default have occurred. Borrower warrants and represents that it has not reached any settlement with any other creditor of Borrower that has not been disclosed in writing to Lender.

E. Release. Borrower for itself and for its agents, partners, stockholders, employees and affiliates and its or their successors and assigns hereby (a) agrees to waive, release and further discharge Lender and its officers, directors, stockholders, partners, successors, assigns, agents and employees of and from any and all manner of claims arising in connection with the Loan Documents for damages at law or in equity with respect to any matter occurring prior to the date hereof which Borrower or such other releasing party may have had, and (b) waives California Civil Code Section 1542, which reads: "A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor." Each provision of this release shall be severable from every other provision when determining its legal enforceability.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Except as amended hereby, the Loan Documents remain unmodified and unchanged and ratified by Borrower as though fully set forth herein. In the event of any contradiction between any term of this Amendment with any other Loan Document, the terms under this Amendment shall control Lender and Borrower have executed this Amendment as of the date first written above.

BORROWER:		**LENDER:**	
FLUIDIGM CORPORATION		**LIGHTHOUSE CAPITAL PARTNERS V, L.P.**	
		By:	**LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,** its general partner
By:	/s/ Gajus Worthington	By:	/s/ Thomas Conneely
Name:	Gajus Worthington	Name:	Thomas Conneely
Title:	CEO	Title:	Vice President

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

AMENDMENT NO. 02 *("Amendment")*
TO LOAN AND SECURITY AGREEMENT NO. 4561

Entered into as of November 16, 2006 by and between
LIGHTHOUSE CAPITAL PARTNERS V, L.P. *("Lender")* and **FLUIDIGM CORPORATION** *("Borrower").*

Without limiting or amending any other provisions of the Agreement, as amended, Lender and Borrower agree to the following:

Section 1.1 of the Agreement, the definition of *"Subordinated Indebtedness"*, shall be amended and restated to read as follows:

"Subordinated Indebtedness" means Indebtedness of Borrower to Singapore EDB (including its investment fund BioMedical Sciences Investment Fund Ptd Ltd) and Invus Group that is subordinated in both security and right of payment to the Obligations on terms and conditions reasonably satisfactory to Lender in an amount not to exceed $13,000,000.

All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Agreement.

BORROWER:	**LENDER:**
FLUIDIGM CORPORATION	**LIGHTHOUSE CAPITAL PARTNERS V, L.P.**
	By: **LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,** its general partner
By: /s/ Rich Delateur	By: /s/ Darren Haggerty
Name: Rich Delateur	Name: Darren Haggerty
Title: Chief Financial Officer	Title: Director of Portfolio Analysis

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

AMENDMENT NO. 03

Dated August 8, 2007

TO

that certain Loan and Security Agreement No. 4561
dated as of March 29, 2005, as amended *("Agreement")*, by and between
LIGHTHOUSE CAPITAL PARTNERS V, L.P. *("Lender")* and
FLUIDIGM CORPORATION , a Delaware corporation (formerly a California corporation) *("Borrower").*

(All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Agreement.)

Without limiting or amending any other provisions of the Loan Documents, Lender and Borrower agree to the following:

Effective March 29, 2007, Borrower's state of incorporation has reincorporated from the State of California to the State of Delaware.

Except as amended hereby, the Loan Documents remains unmodified and unchanged.

BORROWER:		**LENDER:**	
FLUIDIGM CORPORATION		**LIGHTHOUSE CAPITAL PARTNERS V, L.P.**	
		By:	**LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,** its general partner
By:	/s/ Gajus Worthington	By:	/s/ Tom Conneely
Name:	Gajus Worthington	Name:	Tom Conneely
Title:	President & CEO	Title:	Vice President

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Confidential Treatment Requested by Fluidigm Corporation

ORIGINAL

AMENDMENT NO. 04

Dated February 15, 2008

TO

that certain Loan and Security Agreement No. 4561

dated as of March 29, 2005, as amended *("Agreement")*, by and between
LIGHTHOUSE CAPITAL PARTNERS V, L.P. *("Lender")* and
FLUIDIGM CORPORATION *("Borrower").*

THIS AMENDMENT NO. 04 *("Amendment 04")* to that certain Loan and Security Agreement No. 4561 dated March 29, 2005 (as amended to date, the *"Agreement)* is entered into as of February 15, 2008, by and between **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** *("Lender")* and **FLUIDIGM CORPORATION** , a Delaware corporation *("Borrower")* .

WHEREAS, Borrower and Lender have previously entered into and amended the Agreement; and

WHEREAS, Borrower has requested Lender provide an additional term loan financing, which Lender has agreed to provide subject to the terms of this Amendment 04.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants herein contained, the parties hereby agree to modify the Agreement and to perform such other covenants and conditions as follows:

(All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Agreement.)

I. Section 1.1, the following definitions shall be added to the Agreement:

"Change of Management or Board Composition " means that **(i)** Borrower's senior management shall not include Gajus Worthington; **(ii)** Versant Ventures or any of its affiliated funds shall cease to have a representative (currently Samuel Colella) serving on Borrower's Board of Directors; or **(iii)** Alloy Ventures or any of its affiliated funds shall cease to have a representative (currently Mike Hunkapiller) serving on Borrower's Board of Directors.

"Commitment One" means the Commitment as that term is used in the Agreement prior to the effect of this Amendment 04.

"Commitment Two" means $10,000,000.

"Commitment Two Warrant" mean the Warrant in favor of Lender to purchase securities of Borrower, substantially in the form *of **Exhibit C-2*** attached to this Amendment 04 and issued in conjunction with Commitment Two.

II. Section 1.1, the following definitions of the Agreement shall be deleted in its entirety and replaced with the following:

"Basic Rate" (i) under Commitment One, as defined in the Notes, as amended pursuant to Amendment No. 01, and (ii) under Commitment Two, as defined in the Notes for Advances under Commitment Two.

"Commitment" means Commitment One and Commitment Two.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

"*Commitment Fee*" means $10,000 under Commitment One and $10,000 under Commitment Two.

"*Commitment Termination Date*" has occurred for Commitment One, and for Commitment Two it means the earliest to occur of **(i)** July 1, 2008; **(ii)** any Default or Event of Default, or **(iii)** Change of Management or Board Composition (unless Lender has waived this condition in writing).

"*Disclosure Schedule*" means the Disclosure Schedule delivered to Lender in connection with the execution and delivery of Amendment No. 04 to this Agreement.

"*Loan Commencement Date*" means **(i)** for Advances under Commitment One, as defined in the Notes, as amended pursuant to Amendment No. 01, and **(ii)** for Advances under Commitment Two, as defined in the Notes for Advances under Commitment Two.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

"Note" means (i) in connection with Advances under Commitment One, Secured Promissory Notes in the form *of* ***Exhibit B*** , and (ii) in connection with Advances under Commitment Two, Secured Promissory Notes in the form *of* ***Exhibits B-2*** to Amendment 04.

"Notice of Borrowing" means (i) in connection with Advances under Commitment One, the form attached as ***Exhibit D,*** and (ii) in connection with Advances under Commitment Two in the form of ***Exhibit D-2*** attached to Amendment 04.

"Warrant" means (i) all Warrants issued by Borrower to Lender prior to the date of Amendment 04, and (ii) the Commitment Two Warrant.

III. Section 6.2 — Section 6.2 of the Agreement shall be amended deleted in its entirety and replaced with the following:

6.2 Financial Statements, Reports, Certificates. Borrower shall deliver to Lender: **(i)** as soon as prepared, and no later than 30 days after the end of each calendar quarter, a balance sheet, income statement and cash flow statement covering Borrower's operations for each of the three months during such period, provided for each calendar month ending after the calendar quarter ending on September 30, 2008, Borrower shall deliver to Lender as soon as prepared, and no later than 30 days after the end of each calendar month, a balance sheet, income statement and cash flow statement covering Borrower's operations during such period; **(ii)** as soon as prepared, but no later than 90 days after the end of the fiscal year, or such other timeframe formally approved by Borrower's audit committee, audited financial statements prepared in accordance with GAAP, together with an opinion that such financial statements fairly present Borrower's financial condition by an independent public accounting firm reasonably acceptable to Lender; **(iii)** immediately upon notice thereof, a report of any legal or administrative action pending or threatened in writing against Borrower which is likely to result in liability to Borrower in excess of $100,000 (provided that Borrower shall not be required to report notices of possibly relevant third party patents, or proposals or demands to license intellectual property); and **(iv)** such other financial information as Lender may reasonably request from time to time. Financial statements delivered pursuant to subsections **(i)** and **(ii)** above shall be accompanied by a certificate signed by a Responsible Officer (each an *"Officer's Certificate")* in the form *of* ***Exhibit F*****.**

IV. Section 3 — Conditions of Advances; Procedure for requesting Advances; the following new **Sections 3.2 and 3.3** shall be added:

3.2 Procedure for Making Advances. For any Advance, Borrower shall provide Lender an irrevocable Notice of Borrowing at least 15 business days prior to the desired Funding Date and Lender shall only be required to make Advances hereunder based upon written requests which comply with the terms and exhibits of this Loan Agreement (as the same may be amended from time to time), and which are submitted and signed by a Responsible Officer. Borrower shall execute and deliver to Lender a Note and such other documents and instruments as Lender may reasonably require for each Advance made.

3.3. Conditions Precedent to Initial Advance under Commitment Two. The obligation of Lender to make the Initial Advance under Commitment Two is subject the satisfaction of each of the following conditions:

(a) This Amendment 04 duly executed by Borrower.

(b) The Commitment Two Warrant to be issued to Lender duly executed by Borrower.

(c) Delivery to Ledner of an officer's certificate of Borrower with copies of the following documents attached: **(i)** the certificate of incorporation and by-laws or other organizational documents of Borrower certified by Borrower as being in full force and effect as of the date of Amendment 04, **(ii)** incumbency and representative signatures, and **(iii)** resolutions authorizing the execution and delivery of Amendment 04 and each of the other Loan Documents.

(d) Delivery to Lender of a good standing certificate from Borrower's state of incorporation or formation and the state in which Borrower's principal place of business is located, together with certificates of the applicable governmental authorities

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stating that Borrower is in compliance with the franchise tax laws of each such state, each dated as of a recent date.

(e) Borrower has obtained all necessary consents of shareholders, members, and other third parties with respect to the execution, delivery and performance of the Agreement, Amendment 04, the Commitment Two Warrant, and the other Loan Documents.

(f) Borrower shall have satisfied all the conditions set forth in **Section 3.1 and 3.2** of the Agreement.

3.4 Reaffirmation Subject to the Disclosure Schedule attached hereto as Schedule 1, Borrower reaffirms the representations and warranties made to Lender in the Agreement as of the date hereof as though fully set forth herein.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

3.5 Existing Notes Notes for Advances under Commitment Two are not affected by Amendment No. 01 and Notes for Advances under Commitment One remain subject to Amendment No. 01

V. Further Terms and Conditions of this Amendment 04.

1. Representations and Warranties of Borrower. Borrower warrants and represents, as a significant material inducement to Lender to enter hereinto, that: (i) no Events of Default have occurred and are continuing that have not been disclosed to Lender by Borrower in writing; (ii) it is not and has no reason to believe it may be named as a party to any judicial or administrative proceeding, litigation or arbitration, and has not received any written communication from any person or entity (whether private or governmental) threatening or indicating the same, except to the extent that any such written communication could not reasonably be expected to result in a material adverse effect on Borrower's business; and (iii) it is in full compliance with Section 7.10 of the Loan and Security Agreement.
2. No Control. Borrower warrants and represents, as a significant material inducement to Lender to enter hereinto, that none of Lender nor any affiliate, officer, director, employee, agent, or attorney of Lender, have at any time, from Borrower's date of formation through to the date hereof, (i) exercised management or other control over the Borrower, (ii) exercised undue influence over Borrower or any of its officers, employees or directors, (iii) made any representation or warranty, express or implied, to any party on behalf of Borrower, (iv) entered into any joint venture, agency relationship, employment relationship, or partnership with Borrower, (v) directed or instructed Borrower on the manner, method, amount, or identity of payee of any payment made to any creditor of Borrower, and further, Borrower warrants and represents that by entering hereinto with Lender has not, are not and will not have engaged in any of the foregoing.
3. Integration Clause. This Agreement represents and documents the entirety of the agreement and understanding of the parties hereto with respect to its subject matter. All prior understandings, whether oral or written, other than the Loan Documents, are hereby merged hereinto. **NEITHER THE LOAN AND SECURITY AGREEMENT NOR THIS AGREEMENT MAY BE MODIFIED EXCEPT BY A WRITING SIGNED BY LENDER AND BORROWER.** Each provision hereof shall be severable from every other provision when determining its legal enforceability such that Lender's rights and remedies under this Agreement and the Loan Documents may be enforced to the maximum extent permitted under applicable law. This Agreement shall be binding upon, and inure to the benefit of, each party's respective permitted successors and assigns. This Agreement may be executed in counterpart originals, all of which, when taken together, shall constitute one and the same original document. No provision of any other document between Lender and Borrower shall limit the effectiveness hereof or the rights and remedies of Lender against Borrower. In the event of any contradiction or inconsistency among the terms and conditions of this Agreement or any Loan Document, the interpretation most favorable to the interests of Lender shall prevail.

Except as amended hereby, the Agreement remains unmodified and unchanged.

BORROWER:		**LENDER:**	
FLUIDIGM CORPORATION		**LIGHTHOUSE CAPITAL PARTNERS V, L.P.**	
By:	/s/ Gajus Worthington	By:	**LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,** its general partner
Name:	Gajus Worthington	By:	/s/ Thomas Conneely
Title:	President and CEO	Name:	Thomas Conneely
		Title:	Vice President

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT B-2

(COMMITMENT TWO)

[_____]

SECURED PROMISSORY NOTE

This SECURED PROMISSORY NOTE (this *"Note"*) is made _____, 2008, by **FLUIDIGM CORPORATION** (*"Borrower"*) in favor of **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** (collectively with its assigns, *"Lender"*). Initially capitalized terms used and not otherwise defined herein are defined in that certain Loan and Security Agreement No. 4561 between Borrower and Lender dated March 29, 2005, as amended (the *"Loan Agreement"*).

FOR VALUE RECEIVED, Borrower promises to pay in lawful money of the United States, to the order of Lender, at 500 Drake's Landing Road, Greenbrae, California 94904, or such other place as Lender may from time to time designate (" *Lender's Office")*, the principal sum of $_____ (the *"Advance"),* including interest on the unpaid balance and all other amounts due or to become due hereunder according to the terms hereof and of the Loan Agreement.

"Basic Rate" means a fixed per *annum* rate of interest equal 8.5%.

"Final Payment" means 6.5% of the Advance.

"Loan Commencement Date" means January 1,2009.

"Maturity Date" means the last day of the Repayment Period, or if earlier, the date of prepayment under the Note.

"Payment Date" means the first day of each calendar month.

"Prepayment Fee" means (i) if prepaid in the calendar years 2008 or 2009, 3% of the outstanding principal amount being prepaid; (ii) if prepaid in the calendar year 2010, 2% of the outstanding principal amount being prepaid; and (iii) if prepaid in the calendar year 2011 or thereafter, 1% of the outstanding principal amount being prepaid.

"Repayment Period" means the period beginning on the Loan Commencement Date and continuing for 30 calendar months.

1. Repayment. Borrower shall pay principal and interest due hereunder from the Funding Date, until this Note is paid in full, on each Payment Date pursuant to the terms of the Loan Agreement and this Note. Borrower shall pay to Lender, monthly in advance on each Payment Date, interest calculated using the Basic Rate. Beginning on the Loan Commencement Date and on each Payment Date thereafter during the Repayment Period, Borrower shall make equal installments of principal and interest in advance, calculated at the Basic Rate. On the Maturity Date, Borrower shall pay, in addition to all unpaid principal and interest outstanding hereunder, the Final Payment.

2. Interest. Interest not paid when due will, to the maximum extent permitted under applicable law, become part of principal, at Lender's option, and thereafter bear like interest as principal. Interest shall be computed on the basis of a 360 day year. All Obligations not paid when due shall bear interest at the Default Rate unless waived in writing by Lender. All amounts paid hereunder will be applied to the Obligations in Lender's discretion and as provided in the Loan Agreement.

3. Voluntary Prepayment. Borrower may prepay the Note if and only if Borrower pays to Lender **(i)** the outstanding principal amount of this Note and any unpaid accrued interest **(ii)** the Final Payment, **(iv)** the Prepayment Fee, and **(v)** all other sums, if any, that shall have become due and payable hereunder with respect to this Note.

4. Collateral. This Note is secured by the Collateral.

5. Waivers. Borrower, and all guarantors and endorsers of this Note, regardless of the time, order or place of signing, hereby

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waive notice, demand, presentment, protest, and notices of every kind, presentment for the purpose of accelerating maturity, diligence in collection to the fullest extent permitted by law.

6. Choice of Law; Venue. THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. EACH OF BORROWER AND LENDER HEREBY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE CITY AND

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COUNTY OF SAN FRANCISCO, STATE OF CALIFORNIA. BORROWER AND LENDER EACH HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS NOTE. EACH PARTY FURTHER WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION IN WHICH A JURY TRIAL HAS BEEN WAIVED WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED.

7. Miscellaneous. THIS NOTE MAY BE MODIFIED ONLY BY A WRITING SIGNED BY BORROWER AND LENDER. Each provision hereof is severable from every other provision hereof and of the Loan Agreement when determining its legal enforceability. Sections and subsections are titled for convenience, and not for construction. “Hereof,” “herein,” “hereunder,” and similar words refer to this Note in its entirety. “Or” is not necessarily exclusive. “Including” is not limiting. The terms and conditions hereof inure to the benefit of and are binding upon the parties’ respective permitted successors and assigns. This Note is subject to all the terms and conditions of the Loan Agreement.

IN WITNESS WHEREOF, Borrower has caused this Note to be executed by a duly authorized officer as of the day and year first above written.

FLUIDIGM CORPORATION

By:

Name:

Title:

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EXHIBIT C-2

NEITHER THIS WARRANT NOR THE SHARES OF CAPITAL STOCK ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE *"1933 ACT")*, OR ANY APPLICABLE STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED UNLESS SUCH SALE OR TRANSFER IS IN ACCORDANCE WITH THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS OR THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO THE COMPANY, TO THE EFFECT THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS.

PREFERRED STOCK PURCHASE WARRANT

Warrant No._____

Number of Shares: initially, 100,000
Series E Preferred Stock
subject to increase as set forth below

FLUIDIGM CORPORATION

Effective as of February 15, 2008

Void after February 15, 2015

1. Issuance. This Preferred Stock Purchase Warrant (the *"Warrant"*) is issued to **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** by **FLUIDIGM CORPORATION,** a Delaware corporation (hereinafter with its successors called the *"Company"*).

2. Purchase Price; Number of Shares.

(a) The registered holder of this Warrant (the *"Holder"*), commencing on the date hereof, is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company, at a price per share of $4.00 (the *"Purchase Price"*), 100,000 fully paid and nonassessable shares of the Company's Series E Preferred Stock, (the *"Exercise Quantity"*), $0.001 par value (the *"Preferred Stock"*).

(b) On the Commitment Termination Date, the Exercise Quantity shall automatically be increased by such additional number of shares (rounded to the nearest whole share) of Series E Preferred Stock, if any, as is equal to the amount determined by dividing (A) 8% of the Aggregate Advances under the Loan Agreement, if any, by (B) the Purchase Price

In addition to other terms which may be defined herein, the following terms, as used in this Warrant, shall have the following meanings:

(i) "Aggregate Advances" means the aggregate original dollar amount of all Advances made under Commitment Two of the Loan Agreement, whether such Advances are outstanding or prepaid, at the time of any scheduled adjustment to the Exercise Quantity.

(ii) "Loan Agreement" means that certain Loan and Security Agreement No. 4561 dated March 29, 2005 between the Company and Lighthouse Capital Partners V, L.P., as amended.

Any capitalized term not defined herein shall have the meaning as set forth in the Loan Agreement.

Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided. The person or persons in whose name or

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names any certificate representing shares of Preferred Stock is issued hereunder shall be deemed to have become the holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

3. Payment of Purchase Price. The Purchase Price may be paid (i) in cash or by check, (ii) by the surrender by the Holder to the Company of any promissory notes or other obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus accrued interest to the date of surrender, or (iii) by any combination of the foregoing.

4. Net Issue Election. The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares of Preferred Stock equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company, with the net issue election notice annexed hereto duly executed, at the principal office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Preferred Stock as is computed using the following formula:

$$X=\frac{Y(A-B)}{A}$$

where: X= the number of shares of Preferred Stock to be issued to the Holder pursuant to this **Section 4**.
Y= the number of shares of Preferred Stock covered by this Warrant in respect of which the net issue election is made pursuant to this **Section 4** .
A= the Fair Market Value (defined below) of one share of Preferred Stock, as determined at the time the net issue election is made pursuant to this **Section 4** ..
B= the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this **Section 4** .

"Fair Market Value" of a share of Preferred Stock (or fully paid and nonassessable shares of the Company's common stock, $0.001 par value (the *"Common Stock"*) if the Preferred Stock has been automatically converted into Common Stock) as of the date that the net issue election is made (the *"Determination Date"*) shall mean:

(i) If the net issue election is made in connection with and contingent upon the closing of the sale of the Company's Common Stock to the public in a public offering pursuant to a Registration Statement under the Securities Act of 1933, as amended (a *"Public Offering"*), and if the Company's Registration Statement relating to such Public Offering (*"Registration Statement"*) has been declared effective by the Securities and Exchange Commission, then the initial "Price to Public" specified in the final prospectus with respect to such offering multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible.

(ii) If the net issue election is not made in connection with and contingent upon a Public Offering, then as follows:

(a) If traded on a securities exchange or the Nasdaq National Market, the fair market value of the Common Stock shall be deemed to be the average of the closing or last reported sale prices of the Common Stock on such exchange or market over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible;

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(b) If otherwise traded in an over-the-counter market, the fair market value of the Common Stock shall be deemed to be the average of the closing ask prices of the Common Stock over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible; and

(c) If there is no public market for the Common Stock, then fair market value shall be determined in good faith by the Company's Board of Directors.

5. Partial Exercise. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. Fractional Shares. In no event shall any fractional share of Preferred Stock be issued upon any exercise of this Warrant. If, upon exercise of this Warrant in its entirety, the Holder would, except as provided in this **Section 6,** be entitled to receive a fractional share of Preferred Stock, then the Company shall issue the next higher number of full shares of Preferred Stock, issuing a full share with respect to such fractional share.

7. Expiration Date; Automatic Exercise. This Warrant shall expire at the close of business on February 15, 2015, and shall be void thereafter (the *"Expiration Date").* Notwithstanding the term of this Warrant fixed pursuant to this **Section 7,** and provided Holder has received advance written notice of at least twenty (20) days and has not earlier exercised this Warrant, and provided this Warrant has not been assumed by the successor entity (or parent thereof), upon the consummation of a Merger (as defined below), this Warrant shall automatically be exercised pursuant to **Section 4** hereof, without any action by Holder. *"Merger"* means: (i) a sale of all or substantially all of the Company's assets to an Unaffiliated Entity (as defined below), or (ii) the merger, consolidation or acquisition of the Company with, into or by an Unaffiliated Entity (other than a merger or consolidation for the principle purpose of changing the domicile of the Company or a bona fide round of preferred stock equity financing), that results in the Company's shareholders immediately prior to such merger, consolidation, or acquisition holding, immediately thereafter, less than a majority of the outstanding voting securities of the successor corporation or its parent. *"Unaffiliated Entity"* means any entity that is owned or controlled by parties who own less than twenty percent (20%) of the combined voting power of the voting securities of the Company immediately prior to such merger or sale of assets, consolidation or acquisition. Notwithstanding the foregoing, in the event that any outstanding warrants to purchase equity securities of the Company (it being acknowledged and agreed that options to acquire common stock issued to officers, directors, employees and consultants shall not be deemed "warrants") are assumed by the successor entity of a Merger (or parent thereof), this Warrant shall also be similarly assumed and the automatic exercise provision in this **Section 7** shall have no effect. The Company agrees to give the Holder written notice promptly after it has entered into a definitive agreement relating to any proposed Merger and written notice of termination of any definitive agreement relating to any proposed Merger. Notwithstanding anything to the contrary in this Warrant, (i) the Holder may expressly make any voluntary exercise of this Warrant contingent on, and effective immediately prior to, the consummation of such Merger and (ii) any automatic exercise of this Warrant in connection with a Merger shall be conditioned on consummation of such Merger and shall be effective immediately prior thereto.

8. Reserved Shares; Valid Issuance. The Company covenants that it will at all times from and after the date hereof reserve and keep available such number of its authorized shares of Preferred Stock and Common Stock free from all preemptive or similar rights therein, as will be sufficient to permit, respectively, the exercise of this Warrant in full and the conversion into shares of Common Stock of all shares of Preferred Stock receivable upon such exercise. The Company further covenants that such shares as may be issued pursuant to such exercise and/or conversion will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. Stock Splits and Dividends. If after the date hereof the Company shall subdivide the Preferred Stock, by split-up or otherwise, or combine the Preferred Stock, or issue additional shares of Preferred Stock in payment of a stock dividend on the Preferred Stock, the number of shares of Preferred Stock issuable on the exercise

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of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. Adjustments for Diluting Issuances. The antidilution rights applicable to the Series E Preferred Stock of the Company are set forth in the Amended and Restated Certificate of Incorporation, as amended from time to time (the *"Articles"*), a true and complete copy in its current form which has been made available to Holder. Such rights shall not be restated, amended or modified in any manner which affects the Holder differently than the holders of outstanding Series E Preferred Stock without such Holder's prior written consent. The Company shall provide the Holder hereof with any restatement, amendment or modification to the Articles promptly after the same has been made.

11. Mergers and Reclassifications. (a) Except as set forth in **Section 7**, If after the date hereof the Company shall enter into any Reorganization (as hereinafter defined), then, as a condition of such Reorganization, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such Reorganization by a holder of the number of shares of Preferred Stock which might have been purchased by the Holder immediately prior to such Reorganization, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof (including without limitation, provisions for the adjustment of the Purchase Price and the number of shares issuable hereunder and the provisions relating to the net issue election) shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof. For the purposes of this **Section 11,** the term *"Reorganization"* shall include without limitation any reclassification, capital reorganization or change of the Preferred Stock (other than as a result of a subdivision, combination or stock dividend provided for in **Section 9** hereof), or any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a merger in which the Company is the surviving corporation and which does not result in any reclassification or change of the outstanding Preferred Stock), or any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company.

(b) Notwithstanding any other provision of this Warrant, in the event of an automatic conversion of the Company's outstanding Series E Preferred Stock into Common Stock in accordance with the Company's Articles, as in effect from time to time, this Warrant shall thereafter represent the right to acquire for the aggregate Purchase Price (as then in effect) the number of shares of Common Stock into which the number of shares of Preferred Stock issuable upon exercise of this Warrant would have then been convertible.

12. Certificate of Adjustment. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate of the Company's chief financial officer (or other appropriate officer) setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

13. Notices of Record Date, Etc. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase, sell or otherwise acquire or dispose of any shares of stock of any class or any other securities or property, or to receive any other right;

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets; or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company;

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

then in each such event the Company will provide or cause to be provided to the Holder a written notice thereof. Such notice shall be provided at least twenty (20) business days prior to the date specified in such notice on which any such action is to be taken.

14. Representations, Warranties and Covenants. This Warrant is issued and delivered by the Company and accepted by each Holder on the basis of the following representations, warranties and covenants made by the Company:

(a) The Company has all necessary corporate power and authority to issue, execute and deliver this Warrant and to perform its obligations hereunder. This Warrant has been duly authorized issued, executed and delivered by the Company and is the valid and binding obligation of the Company, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy or similar laws relating to the enforcement of creditors' rights generally.

(b) The shares of Preferred Stock issuable upon the exercise of this Warrant have been duly authorized and reserved for issuance by the Company and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable.

(c) The issuance, execution and delivery of this Warrant do not, and the issuance of the shares of Preferred Stock upon the exercise of this Warrant in accordance with the terms hereof will not, (i) violate or contravene the Company's Articles or by-laws, or any law, statute, regulation, rule, judgment or order applicable to the Company, (ii) violate, contravene or result in a breach or default under any contract, agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound or (iii) require the consent or approval of or the filing of any notice or registration with any person or entity (other than such notices or filings as may be required under applicable securities laws).

(d) As long as this Warrant is, or any shares of Preferred Stock issued upon exercise of this Warrant or any shares of Common Stock issued upon conversion of such shares of Preferred Stock are, issued and outstanding, the Company will provide to the Holder the financial and other information described in that certain Loan and Security Agreement No. 4561 between the Company and Lighthouse Capital Partners V, L.P. dated as of March 29, 2005, as amended.

(e) As of the date hereof, the authorized capital stock of the Company consists of (i) 87,385,839 shares of Common Stock, of which 9,946,605 shares are issued and outstanding and 300,000 shares are reserved for issuance upon the exercise of this Warrant with respect to Common Stock and the conversion of the Preferred Stock into Common Stock if this Warrant is exercised with respect to Preferred Stock, (ii) 2,727,273 shares of Series A Preferred Stock, of which 2,727,273 are issued and outstanding shares, (iii) 6,460,675 shares of Series B Preferred Stock, of which 6,460,675 are issued and outstanding shares, (iv) 16,854,624 shares of Series C Preferred Stock, of which 16,364,832 are issued and outstanding shares, (v) 13,962,261 shares of Series D Preferred Stock, of which 13,353,333 are issued and outstanding shares and (vi) 20,109,947 shares of Series E Preferred Stock, of which 17,764,781 are issued and outstanding shares. Company has delivered a capitalization table to Holder summarizing the capitalization of the Company. At the request of Holder, not more than once per calendar quarter, the Company will provide Holder with a current capitalization table indicating changes, if any, to the number of outstanding shares of common stock and preferred stock.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

15. Registration Rights. The Company grants, upon effectiveness of the Rights Agreement referenced herein, to the Holder all the rights of a "Holder" and an "Investor" under the Company's Eighth Amended and Restated Investors' Rights Agreement dated as of June 13, 2006, as amended from time to time (the *"Rights Agreement"*), including, without limitation, the registration rights contained therein, and agrees to solicit approval to amend the Rights Agreement so that (i) the shares of Common Stock issuable upon conversion of the shares of Preferred Stock issuable upon exercise of this Warrant shall be *"Registrable Securities,"* and (ii) the Holder shall be a "Holder" and an "Investor" for all purposes of such Rights Agreement.

16. Amendment. The terms of this Warrant may be amended, modified or waived only with the written consent of the Holder and the Company.

17. Representations and Covenants of the Holder. This Warrant has been entered into by the Company in reliance upon the following representations and covenants of the Holder, which by its execution hereof the Holder hereby confirms:

(a) Investment Purpose. The right to acquire Preferred Stock or the Preferred Stock issuable upon exercise of the Holder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Holder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Accredited Investor. Holder is an "accredited investor" within the meaning of Rule 501 of Regulation D, promulgated under the 1933 Act as presently in effect.

(c) Private Issue. The Holder understands (i) that neither the issuance of this Warrant nor the issuance of any shares of the Company's capital stock issuable upon exercise of the Holder's rights contained herein has been registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuances contemplated by this Warrant will be exempt from the registration and qualifications requirements thereof, and (ii) that the Company's reliance on such exemption is predicated on the representations of the Holderset forth in this **Section 17.**

(d) Financial Risk. The Holder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment and has the ability to bear the economic risks of its investment.

18. Notices, Transfers, Etc.

(a) Any notice or written communication required or permitted to be given to the Holder may be given by certified mail or delivered to the Holder at the address most recently provided by the Holder to the Company.

(b) Subject to compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment notice annexed hereto duly executed, for transfer of this Warrant as an entirety by the Holder, the Company shall issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer with respect to a portion of the shares of Preferred Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof, and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

(c) In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon surrender and cancellation of any mutilated Warrant, or (ii) in lieu of any Warrant lost, stolen or destroyed, upon

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receipt of an affidavit of the Holder or other evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant

19. No Impairment. The Company will not, by amendment of its Articles or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance of performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder. In no event shall any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other transaction be deemed an "impairment" for purposes of this Section 18 if the shares of the Company's capital stock issuable upon exercise of this Warrant are affected thereby in the same manner as outstanding shares of such capital stock.

20. Governing Law. The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the State of California without giving effect to its principles regarding conflicts of laws.

21. Successors and Assigns. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

22. Business Days. If the last or appointed day for the taking of any action required or the expiration of any rights granted herein shall be a Saturday or Sunday or a legal holiday in California, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

23. Value. The Company and the Holder agree that the value of this Warrant on the date of grant is $100.

FLUIDIGM CORPORATION

By: _____

Name: _____

Title: _____

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Subscription

To: _____

Date: _____

The undersigned hereby subscribes for _____ shares of Preferred Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

Signature

Name for Registration

Mailing Address

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Net Issue Election Notice

To: _____ Date: _____

The undersigned hereby elects under **Section 4** to surrender the right to purchase shares of Preferred Stock pursuant to this Warrant. The certificate(s) for such shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below:

Signature

Name for Registration

Mailing Address

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Assignment

For value received _____ hereby sells, assigns and transfers unto

_____

_____

[Please print or typewrite name and address of Assignee]

_____

the within Warrant, and does hereby irrevocably constitute and appoint _____ its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

Dated: _____

Signature

Name for Registration

In the Presence of:

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT D-2

NOTICE OF BORROWING

_____, _____

Lighthouse Capital Partners V, L.P.

500 Drake's Landing Road
Greenbrae, CA 94904-3011

Ladies and Gentlemen:

Reference is made to the Loan and Security Agreement No. 4561 dated as of March 29, 2005 (as it has been and may be amended from time to time, the *"Loan Agreement,"* initially capitalized terms used herein as defined therein), between **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** and **FLUIDIGM CORPORATION** (the *"Company"*)

The undersigned is the President and CEO of the Company, and hereby irrevocably requests an Advance under the Loan Agreement, and in that connection certifies as follows:

1. The amount of the proposed Advance is $_____. The business day of the proposed Advance is _____.

2. The Loan Commencement Date for this Advance shall be March 1, 2006.

3. As of this date, no Event of Default, or event which with notice or the passage of time would constitute an Event of Default, has occurred and is continuing, or will result from the making of the proposed Advance, and the representations and warranties of the Company contained in **Section 5** of the Loan Agreement are true and correct in all material respects.

4. No event that could reasonably be expected to have a material adverse effect on the ability of Borrower to fulfill its obligations under the Loan Agreement has occurred since the date of the most recent financial statements, submitted to you by the Company.

The Company agrees to notify you promptly before the funding of the Advance if any of the matters to which I have certified above shall not be true and correct on the Funding Date.

Very truly yours,

FLUIDIGM CORPORATION

By:

Name:

Title:

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Schedule 1

DISCLOSURE SCHEDULE

DEPOSIT AND SECURITIES ACCOUNTS

	Account Information:	**Contact Information for Account:**
Account Number 1	Company Name: Wells Fargo Bank Address: 420 Montgomery Street, 9th Floor City, State, Zip: San Francisco, CA 94104 Phone: Fax: Type of Account: Checking, Payroll Account number: [***], [***]	Contact Name: Gerry Klein Phone: 415.396.2961 Fax: 415.975.7573 E-mail: gerry.h.klein@wellsfargo.com
Account Number 2	Company Name: Morgan Stanley Address: 555 California Street, Suite 1400 City, State, Zip: San Francisco, CA 94104 Phone: 415.576.2016 Fax: 415-576-2060 Type of Account: Investment Account number: [***]	Contact Name: Thomas Piliero/WAXMAN Phone: 415-576-2016 Fax: 415-576-2060 E-mail: Thomas.Piliero@morganstanley.com
Account Number 3	Company Name: Silicon Valley Bank Address: 3003 Tasman Drive, HF 195 City, State, Zip: Santa Clara, CA 95054 Phone: 510.284.1129 Fax: 510.284.1127 Type of Account: Checking, CDs Account number: [***], [***], [***]	Contact Name: Michael White Phone: 415.512.4215 Fax: 415.856.0810 E-mail: mwhite@svbank.com
Account Number 4	Company Name: Comerica Bank Address: 226 Airport Parkway City, State, Zip: San Jose, CA 95110 Phone: 650.213.1716 Fax: 650.213.1710 Type of Account: Checking, Sweep, LC Account number: [***], [***], [***]	Contact Name: Heather Lynam Phone: 650.213.1726 Fax: 650.213.1710 E-mail: hlynam@comerica.com

SUBSIDIARIES

Fluidigm Singapore Pte. Ltd.
Fluidigm KK
Fluidigm Europe BV
Fluidigm France SARL

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

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PRIOR NAMES

Mycometrix

LITIGATION AND ADMINISTRATIVE PROCEEDINGS

None

BUSINESS PREMISES

	Each Location Address where Lighthouse Capital Partners has financed assets:	**Landlord/Property Management Information:**
Current Headquarters (Location 1)	Contact Name: Jim Neesen Address: 7000 Shoreline Court, Suite 100 City, State, Zip: South San Francisco, CA 94080 Phone: (650) 226-6000 Fax: (650) 871-7152	Contact Name: Bob Farrell, Controller Facility Operations Company Name: Oscient Pharmaceuticals Address: 1000 Winter Street City, State, Zip: Waltham, MA 02451 Phone: (781) 398-2604 Fax: (781) 398-2350 Contact Name: Stephen Richardson Company Name: Alexandria Real Estate Equities, Inc. Address: 2929 Campus Drive, Suite 400-A City, State, Zip: San Mateo, CA 94403 Phone: (650) 286-1200 Fax: (650) 286-1256
Location 2	Contact Name: Mr. Takeshi Iwabuchi Company Name: Fluidigm KK (Sales office) Address: Level 5 Ginza TK Bldg, 1-1-7 Shintomi City, State, Zip: Chuo-Ku, Tokyo, 104-0041 Japan Phone: +813-3555-2351 Fax: +813-3555-2353	Contact Name: Mr. Jyun Kusakabe Company Name: Sankou estate K.K Address: Shibuyanomurasyouken building 1-14-16 Shibuya, Shibuya-Ku, Tokyo, 150-0002 JAPAN Phone: +813-3409-1411 Fax: +813-3409-1413
Location 3	Contact Name: Company Name: Fluidigm KK (Sales Office) Address: Level 3-123 Soukendoshomachi bldg 2-1-10 Doshomachi, Chuo-Ku, Osaka-Shi, Osaka 541-0045 JAPAN City, State, Zip: Osaka Phone: +816-6220-0500 Fax: +816-6220-0660	Contact Name: Ms. Akemi Minamino Company Name: K.K. HIT Address: Level 25 Osakaekimae daisan bldg 1-1-3 Umeda, Kita-Ku, Osaka-Shi Osaka 530-0001 JAPAN Phone: +816-6345-1210 Fax: +816-6347-0660
Location 4	Contact Name: Grace Yow Company Name: Fluidigm Singapore Address: 39 Robinson Road #07-01 Robinson Point City, State, Zip: Singapore 068911	Contact Name: Phoa Cheng Han Company Name: JTC Corporation Address: 8 Jurong Town Hall Road City, State, Zip: Singapore 609434

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Phone: 65 9748 2922
Fax: 65 62825531

Please see attached Disclosure Schedule which by this reference shall be deemed to be a part hereof.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

AMENDMENT NO. 05

Dated May 15, 2008

TO

that certain Loan and Security Agreement No. 4561
dated as of March 29, 2005, as amended *("Agreement")*, by and between
LIGHTHOUSE CAPITAL PARTNERS V, L.P. *("Lender")* and
FLUIDIGM CORPORATION , a Delaware corporation (formerly a California corporation) ("*Borrower*").

(All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Agreement.)

Without limiting or amending any other provisions of the Loan Documents, Lender and Borrower agree to the following:

Section 6.2. Section 6.2 will be deleted and replaced with the following:

6.2 Financial Statements, Reports, Certificates. (i) So long as Borrower is not subject to the reporting requirements of Section 12 or 15 of the Securities and Exchange Act of 1934, as amended (A) commencing for the fiscal month ending on October 25, 2008, and for each fiscal month thereafter, Borrower shall deliver to Lender as soon as prepared and no later than 30 days after the end of each such fiscal month, a balance sheet, income statement and cash flow statement covering Borrower's operations during such period and (B) as soon as prepared, but no later than 90 days after then end of the fiscal year, or such other timeframe formally approved by Borrower's audit committee, audited financial statements prepared in accordance with GAAP, together with an opinion that such financial statements fairly preent Borrower's financial condition by an independent public accounting firm reasonably acceptable to Lender; (ii) immediately upon notice thereof, a report of any legal or administrative action pending or threatened in writing against Borrower which is likely to result in liability to Borrower in excess of $100,000 (provided that Borrower shall not be required to report notices of possibly relevant third party patents, or proposals or demands to license intellectual property); and (iii) such other financial information as Lender may reasonably request from time to time. Financial statements delivered pursuant to subsections (i)(A) and (i)(B) above shall be accompanied by a certificate signed by a Responsible Officer (each an "*Officer's Certificate*") in the form of *Exhibit F*.

Except as amended hereby, the Agreement remains unmodified and unchanged.

BORROWER:

FLUIDIGM CORPORATION

By: /s/ Gajus Worthington

Name: Gajus Worthington

Title: President & CEO

LENDER:

LIGHTHOUSE CAPITAL PARTNERS V, L.P.

By: **LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,** its general partner

By: /s/ Darren Haggerty

Name: Darren Haggerty

Title: Director of Portfolio Analysis

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

AMENDMENT NO. 06

Dated March 25, 2009

TO

that certain Loan and Security Agreement No. 4561
dated as of March 29, 2005, as amended *("Agreement")*, by and between
LIGHTHOUSE CAPITAL PARTNERS V, L.P. *("Lender")* and
FLUIDIGM CORPORATION *("Borrower").*

THIS AMENDMENT NO. 06 ("Amendment 06") to that certain Loan and Security Agreement No. 4561 dated March 29, 2005 (as amended to date, the "Agreement") is entered into as of February 15, 2008, by and between LIGHTHOUSE CAPITAL PARTNERS V, L.P. ("Lender") and FLUIDIGM CORPORATION, a Delaware corporation ("Borrower").

WHEREAS, Borrower and Lender have previously entered into and amended the Agreement; and WHEREAS, the Commitment Termination Date has passed; and

WHEREAS, Borrower has requested Lender provide principal forbearance from March 1, 2009 through February 28, 2010 and otherwise restructure the terms of the Loans as set forth herein; and

WHEREAS, Lender has agreed to do so subject to all of the terms and conditions hereof and of the Agreement;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants herein contained, the parties hereby agree to modify the Agreement and to perform such other covenants and conditions as follows:

(All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Agreement.

I. Section 1.1, the following definitions shall be added to the Agreement:

"*Amendment 06 Note*" means that Amended and Restated Secured Promissory Note in the form of ***Exhibit B-3***.

"*Amendment 06 Warrant*" mean the Warrant in favor of Lender to purchase securities of Borrower, substantially in the form of ***Exhibit C-3*** attached to this Amendment 06.

II. Section 1.1, the following definitions of the Agreement shall be deleted in its entirety and replaced with the following:

"*Commitment Fee*" means $10,000 under Commitment One, $10,000 under Commitment Two and $10,000 under Amendment 06.

"*Disclosure Schedule*" means the Disclosure Schedule delivered to Lender in connection with the execution and delivery of Amendment No. 06.

"*Note*" means (i) in connection with Advances under Commitment One, Secured Promissory Notes in the form of Exhibit B, (ii) in connection with Advances under Commitment Two, Secured Promissory Notes in the form of Exhibits B-2 to Amendment 04, and (iii) in connection with Amendment 06, the Amendment 06 Note.

"*Warrant*" means (i) all Warrants issued by Borrower to Lender prior to the date of Amendment 04, (ii) the Commitment Two Warrant and (iii) the Amendment 06 Warrant.

III. Section 7.10, the following section of the Agreement shall be deleted in its entirety and replaced with the following:

7.10 Deposit and Securities Accounts. Maintain any deposit accounts or accounts holding securities owned by Borrower except accounts in which Lender has obtained a perfected first priority security interest with the exception of (i) account number [***] with Silicon Valley Bank or a successor account with Wells Fargo Bank securing a letter of credit in favor of Borrower's landlord in an amount not to exceed $250,000 in principal amount; (ii) account number [***] with Wells Fargo Bank securing a letter of credit in favor of a lender providing equipment financing to Borrower in an amount not to exceed $500,000

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

in principal amount; or (iii) account number [***] with Wells Fargo Bank securing a letter of credit in favor of Borrower's landlord in an amount not to exceed $137,527 in principal amount; or (iv) account number [***] with respect to its payroll accounts at. Wells Fargo Bank.

IV.

Conditions Precedent to Amendment 06. The obligation of Lender to enter into Amendment 06 is subject the satisfaction of each of the following conditions:

(a) This Amendment 06 duly executed by Borrower.

(b) The Amendment 06 Warrant to be issued to Lender duly executed by Borrower.

(c) The Amendment 06 Note.

(d) Delivery to Lender of an officer's certificate of Borrower with copies of the following documents attached: (i) the certificate of incorporation and by-laws or other organizational documents of Borrower certified by Borrower as being in full force and effect as of the date of Amendment 06, (ii) incumbency and representative signatures, and (iii) resolutions authorizing the execution and delivery of Amendment 06 and each of the other Loan Documents.

(e) Delivery to Lender of a good standing certificate from Borrower's state of incorporation or formation and the state in which Borrower's principal place of business is located, together with certificates of the applicable governmental authorities stating that Borrower is in compliance with the franchise tax laws of each such state, each dated as of a recent date.

(f) Borrower has obtained all necessary consents of shareholders, members, and other third parties with respect to the execution, delivery and performance of the Agreement, Amendment 06, the Amendment 06 Warrant, and the other Loan Documents.

(g) Borrower shall have satisfied all the conditions set forth in Section 3 of the Agreement.

V. Amendment, Restatement and Replacement of the Notes.

The previously funded Notes shall be amended and restated in their entirety with a single note in the form of the Amendment 06 Note and Lender agrees to return the original previously funded Notes to Borrower for cancellation.

VI. Further Terms and Conditions of this Amendment 06.

1. Reaffirmation. Borrower reaffirms, in all material respects, the representations and warranties made to Lender in the Loan and Security Agreement as of the date of Amendment 06 as though fully set forth herein, unless such representations and warranties relate to a specific date, in which case Borrower reaffirms, in all material respects, such representations and warranties as of such date.
2. Expenses: All expenses incurred in connection with the preparation and negotiation of this Amendment 06 are for Borrower's account.
3. Representations and Warranties of Borrower. Borrower warrants and represents, as a significant material inducement to Lender to enter hereinto, that: (i) no Events of Default have occurred and are continuing that have not been disclosed to Lender by Borrower in writing; (ii) it is not and has no reason to believe it may be named as a party to any judicial or administrative proceeding, litigation or arbitration, and has not received any written communication from any person or entity (whether private or governmental) threatening or indicating the same, except to the extent that any such written communication could not reasonably be expected to result in a material adverse effect on Borrower's business; and (iii) it is in full compliance with Section 7.10 of the Loan and Security Agreement.
4. No Control. Borrower warrants and represents, as a significant material inducement to Lender to enter hereinto, that none of Lender nor any affiliate, officer, director, employee, agent, or attorney of Lender, have at any time, from Borrower's date of

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

formation through to the date hereof (i) exercised management or other control over the Borrower, (ii) exercised undue influence over Borrower or any of its officers, employees or directors, (iii) made any representation or warranty, express or implied, to any party on behalf of Borrower, (iv) entered into any joint venture, agency relationship, employment relationship, or partnership with Borrower, (v) directed or instructed Borrower on the manner, method, amount, or identity of payee of any payment made to any creditor of Borrower, and further, Borrower warrants and represents that by entering hereinto with Lender has not, are not and will not have engaged in any of the foregoing.

5. Integration Clause. This Agreement represents and documents the entirety of the agreement and understanding of the parties hereto with respect to its subject matter. All prior understandings, whether oral or written, other than the Loan Documents, are hereby merged hereinto. **NEITHER THE LOAN AND SECURITY AGREEMENT NOR THIS AGREEMENT MAY BE MODIFIED EXCEPT BY A WRITING SIGNED BY LENDER AND BORROWER**. Each provision hereof shall be severable from every other provision when determining its legal enforceability such that Lender's rights and remedies under this Agreement and the Loan Documents may be enforced to the maximum extent permitted under applicable law. This Agreement shall be binding upon, and inure to the benefit of, each party's respective permitted successors and assigns. This Agreement may be executed in counterpart originals, all of which, when taken together, shall constitute one and the same original document. No provision of any other document between Lender and Borrower shall limit the effectiveness hereof or the rights and remedies of Lender against Borrower. In the event of any contradiction or inconsistency among the terms and conditions of this Agreement or any Loan Document, the interpretation most favorable to the interests of Lender shall prevail.

Except as amended hereby, the Agreement remains unmodified and unchanged.

BORROWER:

FLUIDIGM CORPORATION

By: /s/ Gajus Worthington

Name: Gajus Worthington

Title: President & CEO

LENDER:

LIGHTHOUSE CAPITAL PARTNERS V, L.P.

By: **LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,** its general partner

By: /s/ Thomas Conneely

Name: Thomas Conneely

Title: Vice President

Attachments:
Exhibit B-3 – Amendment 06 Note
Exhibit C-3 – Amendment 06 Warrant
Exhibit E-3 – Incumbency Certificate
Schedule I – Disclosure Schedule

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT B-3
(AMENDMENT 06)

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

AMENDMENT NO. 06

Dated March 25, 2009

TO

that certain Loan and Security Agreement No. 4561
dated as of March 29, 2005, as amended ("Agreement"), by and between
LIGHTHOUSE CAPITAL PARTNERS V, L.P. ("Lender") and
FLUIDIGM CORPORATION ("Borrower").

THIS AMENDMENT NO. 06 ("*Amendment 06*") to that certain Loan and Security Agreement No. 4561 dated March 29, 2005 (as amended to date, the "*Agreement*") is entered into as of February 15, 2008, by and between **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** ("*Lender*") and **FLUIDIGM CORPORATION**, a Delaware corporation ("*Borrower*").

WHEREAS, Borrower and Lender have previously entered into and amended the Agreement; and

WHEREAS, the Commitment Termination Date has passed; and

WHEREAS, Borrower has requested Lender provide principal forbearance from March 1, 2009 through February 28, 2010 and otherwise restructure the terms of the Loans as set forth herein; and

WHEREAS, Lender has agreed to do so subject to all of the terms and conditions hereof and of the Agreement;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants herein contained, the parties hereby agree to modify the Agreement and to perform such other covenants and conditions as follows:

(All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Agreement.)

I. **Section 1.1**, the following definitions shall be added to the Agreement:

"*Amendment 06 Note*" means that Amended and Restated Secured Promissory Note in the form of ***Exhibit B-3***.

"*Amendment 06 Warrant*" mean the Warrant in favor of Lender to purchase securities of Borrower, substantially in the form of ***Exhibit C-3*** attached to this Amendment 06.

II. **Section 1.1**, the following definitions of the Agreement shall be deleted in its entirety and replaced with the following:

"*Commitment Fee*" means $10,000 under Commitment One, $10,000 under Commitment Two and $10,000 under Amendment 06.

"*Disclosure Schedule*" means the Disclosure Schedule delivered to Lender in connection with the execution and delivery of Amendment No. 06.

"*Note*" means (i) in connection with Advances under Commitment One, Secured Promissory Notes in the form of ***Exhibit B***, (ii) in connection with Advances under Commitment Two, Secured Promissory Notes in the form of ***Exhibits B-2*** to Amendment 04, and (iii) in connection with Amendment 06, the Amendment 06 Note.

"*Warrant*" means (i) all Warrants issued by Borrower to Lender prior to the date of Amendment 04, (ii) the Commitment Two Warrant and (iii) the Amendment 06 Warrant.

III. **Section 7.10**, the following section of the Agreement shall be deleted in its entirety and replaced with the following:

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

7.10 Deposit and Securities Accounts. Maintain any deposit accounts or accounts holding securities owned by Borrower except accounts in which Lender has obtained a perfected first priority security interest with the exception of (i) account number [***] with Silicon Valley Bank or a successor account with Wells Fargo Bank securing a letter of credit in favor of Borrower's landlord in an amount not to exceed $250,000 in principal amount; (ii) account number [***] with Wells Fargo Bank securing a letter of credit in favor of a lender providing equipment financing to Borrower in an amount not to exceed $500,000 in principal amount; or (iii) account number [***] with Wells Fargo Bank securing a letter of credit in favor of Borrower's landlord in an amount not to exceed $137,527 in principal amount; or (iv) account number [***] with respect to its payroll accounts at Wells Fargo Bank.

IV.

Conditions Precedent to Amendment 06. The obligation of Lender to enter into Amendment 06 is subject the satisfaction of each of the following conditions:

(a) This Amendment 06 duly executed by Borrower.

(b) The Amendment 06 Warrant to be issued to Lender duly executed by Borrower.

(c) The Amendment 06 Note.

(d) Delivery to Lender of an officer's certificate of Borrower with copies of the following documents attached: (i) the certificate of incorporation and by-laws or other organizational documents of Borrower certified by Borrower as being in full force and effect as of the date of Amendment 06, (ii) incumbency and representative signatures, and (iii) resolutions authorizing the execution and delivery of Amendment 06 and each of the other Loan Documents.

(e) Delivery to Lender of a good standing certificate from Borrower's state of incorporation or formation and the state in which Borrower's principal place of business is located, together with certificates of the applicable governmental authorities stating that Borrower is in compliance with the franchise tax laws of each such state, each dated as of a recent date.

(f) Borrower has obtained all necessary consents of shareholders, members, and other third parties with respect to the execution, delivery and performance of the Agreement, Amendment 06, the Amendment 06 Warrant, and the other Loan Documents.

(g) Borrower shall have satisfied all the conditions set forth in **Section 3** of the Agreement.

V. Amendment, Restatement and Replacement of the Notes.

The previously funded Notes shall be amended and restated in their entirety with a single note in the form of the Amendment 06 Note and Lender agrees to return the original previously funded Notes to Borrower for cancellation.

VI. Further Terms and Conditions of this Amendment 06.

1. Reaffirmation. Borrower reaffirms, in all material respects, the representations and warranties made to Lender in the Loan and Security Agreement as of the date of Amendment 06 as though fully set forth herein, unless such representations and warranties relate to a specific date, in which case Borrower reaffirms, in all material respects, such representations and warranties as of such date.
2. Expenses: All expenses incurred in connection with the preparation and negotiation of this Amendment 06 are for Borrower's account.
3. Representations and Warranties of Borrower. Borrower warrants and represents, as a significant material inducement to Lender to enter hereinto, that: (i) no Events of Default have occurred and are continuing that have not been disclosed to Lender by Borrower in writing; (ii) it is not and has no reason to believe it may be named as a party to any judicial or administra-

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

tive proceeding, litigation or arbitration, and has not received any written communication from any person or entity (whether private or governmental) threatening or indicating the same, except to the extent that any such written communication could not reasonably be expected to result in a material adverse effect on Borrower's business; and (iii) it is in full compliance with Section 7.10 of the Loan and Security Agreement.

4. No Control. Borrower warrants and represents, as a significant material inducement to Lender to enter hereinto, that none of Lender nor any affiliate, officer, director, employee, agent, or attorney of Lender, have at any time, from Borrower's date of formation through to the date hereof (i) exercised management or other control over the Borrower, (iii) exercised undue influence over Borrower or any of its officers, employees or directors, (iii) made any representation or warranty, express or implied, to any party on behalf of Borrower, (iv) entered into any joint venture, agency relationship, employment relationship, or partnership with Borrower, (v) directed or instructed Borrower on the manner, method, amount, or identity of payee of any payment made to any creditor of Borrower, and further, Borrower warrants and represents that by entering hereinto with Lender has not, are not and will not have engaged in any of the foregoing.

5. Integration Clause. This Agreement represents and documents the entirety of the agreement and understanding of the par-ties hereto with respect to its subject matter. All prior understandings, whether oral or written, other than the Loan Documents, are hereby merged hereinto. **NEITHER THE LOAN AND SECURITY AGREEMENT NOR THIS AGREEMENT MAY BE MODIFIED EXCEPT BY A WRITING SIGNED BY LENDER AND BORROWER**. Each provision hereof shall be severable from every other provision when determining its legal enforceability such that Lender's rights and remedies under this Agreement and the Loan Documents may be enforced to the maximum extent permitted under applicable law. This Agreement shall be binding upon, and inure to the benefit of, each party's respective permitted successors and assigns. This Agreement may be executed in counterpart originals, all of which, when taken together, shall constitute one and the same original document. No provision of any other document between Lender and Borrower shall limit the effectiveness hereof or the rights and remedies of Lender against Borrower. In the event of any contradiction or inconsistency among the terms and conditions of this Agreement or any Loan Document, the interpretation most favorable to the interests of Lender shall prevail.

Except as amended hereby, the Agreement remains unmodified and unchanged.

BORROWER:

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington

Name: Gajus V. Worthington

Title: CEO

LENDER:

LIGHTHOUSE CAPITAL PARTNERS V, L.L.C.

By: **LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,**
its General partner

By: /s/ Thomas Conneely

Name: Vice President

Attachments:

Exhibit B-3 – Amendment 06 Note
Exhibit C-3 – Amendment 06 Warrant
Exhibit E-3 – Incumbency Certificate
Schedule 1 – Disclosure Schedule

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT B-3

(AMENDMENT 06)

$12,960,149

AMENDED AND RESTATED SECURED PROMISSORY NOTE

This AMENDED AND RESTATED SECURED PROMISSORY NOTE (this "*Note*") is made March 1, 2009, by **FLUIDIGM CORPORATION** ("*Borrower*") in favor of **LIGHTHOUSE CAPITAL PARTNERS V, L.P**. (collectively with its assigns, "*Lender*"), and its assigns (collectively, "*Holder*")" amends and restates (but does not novate) in their entirety the Secured Promissory Notes under the Commitments, with reference to the following:

FOR VALUE RECEIVED, Borrower promises to pay in lawful money of the United States, to the order of Lender, at 500 Drake's Landing Road, Greenbrae, California 94904, or such other place as Lender may from time to time designate ("*Lender's Office*"), the sum of $12,960,149 plus all other monies advanced under or owing on account of the Advance evidenced hereby under Commitments One and Two of Loan and Security Agreement No. 4561 between Borrower and Lender dated March 29, 2005, as amended (the "*Loan Agreement*"), including interest on the unpaid balance of the Advance at the Basic Rate accruing from the Funding Date, and all other amounts due or to become due hereunder according to the terms hereof. Capitalized terms used and not otherwise defined herein are defined in the Loan Agreement.

"*Basic Rate*" means a fixed per annum rate of interest equal 13.5%.

"*Final Payment*" means $2,112,500, due and payable on the Maturity Date.

"*Loan Commencement Date*" means March 1, 2010.

"*Maturity Date*" means the last day of the Repayment Period, or if earlier, the date of prepayment under the Note. "*Payment Date*" means the first day of each calendar month.

"*Prepayment Fee*" means 1.5% of the outstanding principal amount being prepaid.

"*Repayment Period*" means the period beginning on the Loan Commencement Date and continuing for 24 calendar months.

"*Restructure Fee*" means $150,000, due and payable on the Maturity Date.

1. **Repayment**. Borrower shall pay principal and interest due hereunder from the Funding Date, until this Note is paid in full, on each Payment Date pursuant to the terms of the Loan Agreement and this Note. Prior to the Loan Commencement Date, Borrower shall pay to Lender, monthly in advance on each Payment Date, interest calculated using the Basic Rate. Beginning on the Loan Commencement Date and on each Payment Date thereafter during the Repayment Period, Borrower shall make equal installments of principal and interest in advance, calculated at the Basic Rate. On the Maturity Date, Borrower shall pay, in addition to all unpaid principal and interest outstanding hereunder, the Final Payment and the Restructure Fee.

2. **Interest**. Interest not paid when due will, to the maximum extent permitted under applicable law, become part of principal, at Lender's option, and thereafter bear like interest as principal. Interest shall be computed on the basis of a 360 day year. All Obligations not paid when due shall bear interest at the Default Rate unless waived in writing by Lender. All amounts paid hereunder will be applied to the Obligations in Lender's discretion and as provided in the Loan Agreement.

3. **Voluntary Prepayment**. Borrower may prepay the Note if and only if Borrower pays to Lender (i) the outstanding principal amount of this Note and any unpaid accrued interest (ii) the Final Payment, (iii) the Restructure Fee, (iv) the Prepayment Fee, and (v) all other sums, if any, that shall have become due and payable hereunder with respect to this Note.

4. **Collateral**. This Note is secured by the Collateral.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

5. **Waivers**. Borrower, and all guarantors and endorsers of this Note, regardless of the time, order or place of signing, hereby waive notice, demand, presentment, protest, and notices of every kind, presentment for the purpose of accelerating maturity, diligence in collection to the fullest extent permitted by law.

6. **Choice of Law; Venue**. **THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. EACH OF BORROWER AND LENDER HEREBY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE CITY AND COUNTY OF SAN FRANCISCO, STATE OF CALIFORNIA. BORROWER AND LENDER EACH HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS NOTE. EACH PARTY FURTHER WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION IN WHICH A JURY TRIAL HAS BEEN WAIVED WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED.**

7. **Miscellaneous**. THIS NOTE MAY BE MODIFIED ONLY BY A WRITING SIGNED BY BORROWERS AND LENDER. Each provision hereof is severable from every other provision hereof and of the Loan Agreement when determining its legal enforceability. Sections and subsections are titled for convenience, and not for construction. “Hereof,” “herein,” “hereunder,” and similar words refer to this Note in its entirety. “Or” is not necessarily exclusive. “Including” is not limiting. The terms and conditions hereof inure to the benefit of and are binding upon the parties’ respective permitted successors and assigns. This Note is subject to all the terms and conditions of the Loan Agreement.

IN WITNESS WHEREOF, Borrower has caused this Note to be executed by a duly authorized officer as of the day and year first above written.

FLUIDIGM CORPORATION

By: _____

Name: _____

Title: _____

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit C-3

Amendment 06 Warrant

1.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EITHER THIS WARRANT NOR THE SHARES OF CAPITAL STOCK ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "*1933 ACT*"), OR ANY APPLICABLE STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED UNLESS SUCH SALE OR TRANSFER IS IN ACCORDANCE WITH THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS OR THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO THE COMPANY, TO THE EFFECT THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS.

PREFERRED STOCK PURCHASE WARRANT

Warrant No. _____

Number of Shares: $1,000,000/Purchase Price
Preferred Stock
subject to change as set forth below

FLUIDIGM CORPORATION

Effective as of March 25, 2009

Void after March 25, 2016

1. **Issuance**. This Preferred Stock Purchase Warrant (the "*Warrant*") is issued to **LIGHTHOUSE CAPITAL PARTNERS** V, L.P. by **FLUIDIGM CORPORATION**, a Delaware corporation (hereinafter with its successors called the "*Company*").

2. **Purchase Price; Number of Shares**. The registered holder of this Warrant (the "*Holder*"), commencing on the date hereof, is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company, at a price per share equal to the Purchase Price, that number of fully paid and nonassessable shares of the Company's Preferred Stock equal to $1,000,000, *divided* by the Purchase Price.

Until such time as the Next Round Financing (as defined below) closes, the Holder shall have the right, in substitution of the rights granted to Holder above, upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company, at a price per share equal to the Purchase Price, that number of shares the Prior Preferred Stock equal to $1,000,000, *divided by* the Purchase Price.

In addition to other terms which may be defined herein, the following terms, as used in this Warrant, shall have the following meanings:

(i) "*Next Round Financing*" means the Company's next bona fide round of preferred stock equity financing resulting in net aggregate proceeds to the Company in an amount equal to or in excess of $10,000,000.

(ii) "*Next Round Stock*" means the class or series of the Company's preferred equity securities issued in connection with the Next Round Financing.

(iii) "*Preferred Stock*" means (i) in the event the purchase price of Next Round Stock is less than $14.00 per share, Next Round Stock, otherwise (ii) Prior Preferred Stock.

(iv) "*Prior Preferred Stock*" means the Company's Series E Preferred Stock.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(v) "*Purchase Price*" means (i) in connection with the exercise of this Warrant with respect to Next Round Stock, the lowest price per share paid by an investor for a share of Next Round Stock in connection with the Next Round Financing or (ii) in connection with the exercise of this Warrant with respect to the Prior Preferred Stock, $14.00.

Any capitalized term not defined herein shall have the meaning as set forth in the Loan Agreement.

Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided. The person or persons in whose name or names any certificate representing shares of Preferred Stock is issued hereunder shall be deemed to have become the holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

3. **Payment of Purchase Price**. The Purchase Price may be paid (i) in cash or by check, (ii) by the surrender by the Holder to the Company of any promissory notes or other obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus accrued interest to the date of surrender, or (iii) by any combination of the foregoing.

4. **Net Issue Election**. The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares of Preferred Stock equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company, with the net issue election notice annexed hereto duly executed, at the principal office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Preferred Stock as is computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

where: X = the number of shares of Preferred Stock to be issued to the Holder pursuant to this **Section 4**.

Y = the number of shares of Preferred Stock covered by this Warrant in respect of which the net issue election is made pursuant to this **Section 4**.

A = the Fair Market Value (defined below) of one share of Preferred Stock, as determined at the time the net issue election is made pursuant to this **Section 4**.

B = the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this **Section 4.**

"*Fair Market Value*" of a share of Preferred Stock (or fully paid and nonassessable shares of the Company's common stock, $0.001 par value (the "*Common Stock*") if the Preferred Stock has been automatically converted into Common Stock) as of the date that the net issue election is made (the "*Determination Date*") shall mean:

(i) If the net issue election is made in connection with and contingent upon the closing of the sale of the Company's Common Stock to the public in a public offering pursuant to a Registration Statement under the Securities Act of 1933, as amended (a "*Public Offering*"), and if the Company's Registration Statement relating to such Public Offering ("*Registration Statement*") has been declared effective by the Securities and Exchange Commission, then the initial "Price to Public" specified in the final prospectus with respect to such offering multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible.

(ii) If the net issue election is not made in connection with and contingent upon a Public Offering, then as follows:

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(a) If traded on a securities exchange or the Nasdaq National Market, the fair market value of the Common Stock shall be deemed to be the average of the closing or last reported sale prices of the Common Stock on such exchange or market over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible;

(b) If otherwise traded in an over-the-counter market, the fair market value of the Common Stock shall be deemed to be the average of the closing ask prices of the Common Stock over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible; and

(c) If there is no public market for the Common Stock, then fair market value shall be determined in good faith by the Company's Board of Directors.

5. **Partial Exercise**. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. **Fractional Shares**. In no event shall any fractional share of Preferred Stock be issued upon any exercise of this Warrant. If; upon exercise of this Warrant in its entirety, the Holder would, except as provided in this Section 6, be entitled to receive a fractional share of Preferred Stock, then the Company shall issue the next higher number of full shares of Preferred Stock, issuing a full share with respect to such fractional share.

7. **Expiration Date; Automatic Exercise**. This Warrant shall expire at the close of business on March 25, 2016, and shall be void thereafter (the "*Expiration Date*"). Notwithstanding the term of this Warrant fixed pursuant to this Section 7, and provided Holder has received advance written notice of at least twenty (20) days and has not earlier exercised this Warrant, and provided this Warrant has not been assumed by the successor entity (or parent thereof), upon the consummation of a Merger (as defined below), this Warrant shall automatically be exercised pursuant to Section 4 hereof, without any action by Holder. "*Merger*" means: (i) a sale of all or substantially all of the Company's assets to an Unaffiliated Entity (as defined below), or (ii) the merger, consolidation or acquisition of the Company with, into or by an Unaffiliated Entity (other than a merger or consolidation for the principle purpose of changing the domicile of the Company or a bona fide round of preferred stock equity financing), that results in the Company's shareholders immediately prior to such merger, consolidation, or acquisition holding, immediately thereafter, less than a majority of the outstanding voting securities of the successor corporation or its parent. "*Unaffiliated Entity*" means any entity that is owned or controlled by parties who own less than twenty percent (20%) of the combined voting power of the voting securities of the Company immediately prior to such merger or sale of assets, consolidation or acquisition. Notwithstanding the foregoing, in the event that any outstanding warrants to purchase equity securities of the Company (it being acknowledged and agreed that options to acquire common stock issued to officers, directors, employees and consultants shall not be deemed "warrants") are assumed by the successor entity of a Merger (or parent thereof), this Warrant shall also be similarly assumed and the automatic exercise provision in this **Section 7** shall have no effect. The Company agrees to give the Holder written notice promptly after it has entered into a definitive agreement relating to any proposed Merger and written notice of termination of any definitive agreement relating to any proposed Merger. Notwithstanding anything to the contrary in this Warrant, (i) the Holder may expressly make any voluntary exercise of this Warrant contingent on, and effective immediately prior to, the consummation of such Merger and (ii) any automatic exercise of this Warrant in connection with a Merger shall be conditioned on consummation of such Merger and shall be effective immediately prior thereto.

8. **Reserved Shares; Valid Issuance**. The Company covenants that it will at all times from and after the date hereof reserve and keep available such number of its authorized shares of Preferred Stock and Common Stock free from all preemptive or similar rights therein, as will be sufficient to permit, respectively, the exercise of this Warrant in full and the conversion into shares of Common Stock of all shares of Preferred Stock receivable

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upon such exercise. The Company further covenants that such shares as may be issued pursuant to such exercise and/or conversion will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. **Stock Splits and Dividends**. If after the date hereof the Company shall subdivide the Preferred Stock, by split-up or otherwise, or combine the Preferred Stock, or issue additional shares of Preferred Stock in payment of a stock dividend on the Preferred Stock, the number of shares of Preferred Stock issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. **Adjustments for Diluting Issuances**. The antidilution rights applicable to the Series E Preferred Stock of the Company are set forth in the Amended and Restated Certificate of Incorporation, as amended from time to time (the "*Articles*"), a true and complete copy in its current form which has been made available to Holder. Such rights shall not be restated, amended or modified in any manner which affects the Holder differently than the holders of outstanding Series E Preferred Stock without such Holder's prior written consent. The Company shall provide the Holder hereof with any restatement, amendment or modification to the Articles promptly after the same has been made.

11. **Mergers and Reclassifications**. (a) Except as set forth in **Section 7**, If after the date hereof the Company shall enter into any Reorganization (as hereinafter defined), then, as a condition of such Reorganization, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such Reorganization by a holder of the number of shares of Preferred Stock which might have been purchased by the Holder immediately prior to such Reorganization, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof (including without limitation, provisions for the adjustment of the Purchase Price and the number of shares issuable hereunder and the provisions relating to the net issue election) shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof. For the purposes of this **Section 11**, the term "*Reorganization*" shall include without limitation any reclassification, capital reorganization or change of the Preferred Stock (other than as a result of a subdivision, combination or stock dividend provided for in **Section 9** hereof), or any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a merger in which the Company is the surviving corporation and which does not result in any reclassification or change of the outstanding Preferred Stock), or any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company.

(b) Notwithstanding any other provision of this Warrant, in the event of an automatic conversion of the Company's outstanding Series E Preferred Stock into Common Stock in accordance with the Company's Articles, as in effect from time to time, this Warrant shall thereafter represent the right to acquire for the aggregate Purchase Price (as then in effect) the number of shares of Common Stock into which the number of shares of Preferred Stock issuable upon exercise of this Warrant would have then been convertible.

12. **Certificate of Adjustment**. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate of the Company's chief financial officer (or other appropriate officer) setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

13. **Notices of Record Date, Etc**. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right

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to subscribe for, purchase, sell or otherwise acquire or dispose of any shares of stock of any class or any other securities or property, or to receive any other right;

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets; or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company; then in each such event the Company will provide or cause to be provided to the Holder a written notice thereof. Such notice shall be provided at least twenty (20) business days prior to the date specified in such notice on which any such action is to be taken.

14. **Representations, Warranties and Covenants**. This Warrant is issued and delivered by the Company and accepted by each Holder on the basis of the following representations, warranties and covenants made by the Company:

(a) The Company has all necessary corporate power and authority to issue, execute and deliver this Warrant and to perform its obligations hereunder. This Warrant has been duly authorized issued, executed and delivered by the Company and is the valid and binding obligation of the Company, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy or similar laws relating to the enforcement of creditors' rights generally.

(b) The shares of Preferred Stock issuable upon the exercise of this Warrant have been duly authorized and reserved for issuance by the Company and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable.

(c) The issuance, execution and delivery of this Warrant do not, and the issuance of the shares of Preferred Stock upon the exercise of this Warrant in accordance with the terms hereof will not, (i) violate or contravene the Company's Articles or by-laws, or any law, statute, regulation, rule, judgment or order applicable to the Company, (ii) violate, contravene or result in a breach or default under any contract, agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound or (iii) require the consent or approval of or the filing of any notice or registration with any person or entity (other than such notices or filings as may be required under applicable securities laws).

(d) As long as this Warrant is, or any shares of Preferred Stock issued upon exercise of this Warrant or any shares of Common Stock issued upon conversion of such shares of Preferred Stock are, issued and outstanding, the Company will provide to the Holder the financial and other information described in that certain Loan and Security Agreement No. 4561 between the Company and Lighthouse Capital Partners V, L.P. dated as of March 29, 2005, as amended.

(e) As of the date hereof, the authorized capital stock of the Company consists of (i) 24,967,382 shares of Common Stock, of which 2,905,259 shares are issued and outstanding, and a sufficient number of which are reserved for issuance upon the conversion of the Prior Preferred Stock into Common Stock in the event that this Warrant is exercised with respect to Prior Preferred Stock, (ii) 779,220 shares of Series A Preferred Stock, of which 779,204 are issued and outstanding shares, (iii) 1,845,907 shares of Series B Preferred Stock, of which 1,845,888 are issued and outstanding shares, (iv) 4,815,606 shares of Series C Preferred Stock, of which 4,680,329 are issued and outstanding shares, (v) 3,989,217 shares of Series I) Preferred Stock, of which 3,815,218 are issued and outstanding shares and (vi) 5,745,699 shares of Series E Preferred Stock, of which 5,505,331 are issued and outstanding shares. Company has delivered a capitalization table to Holder summarizing the capitalization of the Company. At the request of Holder, not more than once per calendar quarter, the Company will provide Holder with a current capitalization table indicating changes, if any, to the number of outstanding shares of common stock and preferred stock.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

15. **Registration Rights**. The Company grants, upon effectiveness of the Rights Agreement referenced herein, to the Holder all the rights of a "Holder" and an "Investor" under the Company's Eighth Amended and Restated Investors' Rights Agreement dated as of June 13, 2006, as amended from time to time (the "*Rights Agreement*"), including, without limitation, the registration rights contained therein, and agrees to solicit approval to amend the Rights Agreement so that (i) the shares of Common Stock issuable upon conversion of the shares of Preferred Stock issuable upon exercise of this Warrant shall be "*Registrable Securities*," and (ii) the Holder shall be a "Holder" and an "Investor" for all purposes of such Rights Agreement.

16. **Amendment**. The terms of this Warrant may be amended, modified or waived only with the written consent of the Holder and the Company.

17. **Representations and Covenants of the Holder**. This Warrant has been entered into by the Company in reliance upon the following representations and covenants of the Holder, which by its execution hereof the Holder hereby confirms:

(a) **Investment Purpose**. The right to acquire Preferred Stock or the Preferred Stock issuable upon exercise of the Holder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Holder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) **Accredited Investor**. Holder is an "accredited investor" within the meaning of Rule 501 of Regulation D, promulgated under the 1933 Act as presently in effect.

(c) **Private Issue**. The Holder understands (i) that neither the issuance of this Warrant nor the issuance of any shares of the Company's capital stock issuable upon exercise of the Holder's rights contained herein has been registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuances contemplated by this Warrant will be exempt from the registration and qualifications requirements thereof, and (ii) that the Company's reliance on such exemption is predicated on the representations of the Holderset forth in this Section 17.

(d) **Financial Risk**. The Holder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment and has the ability to bear the economic risks of its investment.

18. **Notices, Transfers, Etc**.

(a) Any notice or written communication required or permitted to be given to the Holder may be given by certified mail or delivered to the Holder at the address most recently provided by the Holder to the Company.

(b) Subject to compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment notice annexed hereto duly executed, for transfer of this Warrant as an entirety by the Holder, the Company shall issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer with respect to a portion of the shares of Preferred Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof, and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

(c) In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon surrender and cancellation of any mutilated Warrant, or (ii) in lieu of any Warrant lost, stolen or destroyed, upon

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

receipt of an affidavit of the Holder or other evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant

19. **No Impairment**. The Company will not, by amendment of its Articles or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance of performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder. In no event shall any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other transaction be deemed an "impairment" for purposes of this Section 18 if the shares of the Company's capital stock issuable upon exercise of this Warrant are affected thereby in the same manner as outstanding shares of such capital stock.

20. **Governing Law.** The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the State of California without giving effect to its principles regarding conflicts of laws.

21. **Successors and Assigns**. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

22. **Business Days**. If the last or appointed day for the taking of any action required or the expiration of any rights granted herein shall be a Saturday or Sunday or a legal holiday in California, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

23. **Value**. The Company and the Holder agree that the value of this Warrant on the date of grant is $100.

FLUIDIGM CORPORATION

By: _____

Name: _____

Title: _____

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Subscription

To: _____

Date: _____

The undersigned hereby subscribes for _____ shares of Preferred Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Net Issue Election Notice

To: _____ Date: _____

The undersigned hereby elects under Section 4 to surrender the right to purchase shares of Preferred Stock pursuant to this Warrant. The certificate(s) for such shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Assignment

For value received _____ hereby sells, assigns and transfers unto

_____

_____

[Please print or typewrite name and address of Assignee]

_____

the within Warrant, and does hereby irrevocably constitute and appoint_____
its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

Dated: _____

_____

Signature

_____

Name for Registration

In the Presence of:

_____

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT A

Amended and Restated Certificate of Incorporation

See attached pages.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit E-3

Incumbency Certificate

1.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

INCUMBENCY CERTIFICATE

The undersigned, William Smith, hereby certifies that:

1. He is the duly elected and acting Vice President, Legal Affairs and General Counsel, Secretary of **FLUIDIGM CORPORATION**, a Delaware corporation (the "*Company*").

2. That on the date hereof, each person listed below holds the office in the Company indicated opposite his or her name and that the signature appearing thereon is the genuine signature of each such person:

NAME	OFFICE	SIGNATURE
Gajus Worthington	President and CEO	
Vikram Jog	Chief Financial Officer	

3. Attached hereto as ***Exhibit A*** is a true and correct copy of the Certificate of Incorporation of the Company, as amended, as in effect as of the date hereof.

4. Attached hereto as ***Exhibit B*** is a true and correct copy of the Bylaws of the Company, as amended, as in effect as of the date hereof.

5. Attached hereto as ***Exhibit C*** is a copy of the resolutions of the Board of Directors of the Company authorizing and approving the Company's execution, delivery and performance of a loan facility with Lighthouse Capital Partners V, L.P.

IN WITNESS WHEREOF, the undersigned has executed this Incumbency Certificate on March 31, 2009.

FLUIDIGM CORPORATION

By: _____

Name: _____

Title: _____

I, the President and CEO of the Company, do hereby certify that William M. Smith is the duly qualified, elected and acting Vice President, Legal Affairs and General Counsel, Secretary of the Company and that the above signature is his genuine signature.

IN WITNESS WHEREOF, the undersigned has executed and delivered this Officer's Certificate on March __, 2009.

FLUIDIGM CORPORATION

By: _____

Name: _____

Title: _____

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Schedule 1

DISCLOSURE SCHEDULE

DEPOSIT AND SECURITIES ACCOUNTS

	Account Information:		**Contact Information for Account:**	
Account Number 1	Company Name:	Wells Fargo Bank	Contact Name:	Albina Khazan
	Address:	420 Montgomery Street, 9th Floor	Phone:	415.396 2961
	City, State, Zip:	San Francisco, CA 94104	Fax:	415.975.7573
	Phone:		E-mail:	albina.khazan@wellsfargo.com
	Fax:			
	Type of Account:	Checking, Payroll		
	Account number:	[***], [***], [***]		
Account Number 2	Company Name:	Morgan Stanley	Contact Name:	Thomas Pilero
	Address:	555 California Street, Suite 1400	Phone:	415-576-2016
			Fax:	415-576-2060
	City, State, Zip:	San Francisco, CA 94104	E-mail:	Thomas.Piliero@morganstanley.com
	Phone:	415.576.2016		
	Fax:	415-576-2060		
	Type of Account:	Investment		
	Account number:	[***]		
Account Number 3	Company Name:	Silicon Valley Bank	Contact Name:	Antony Budiman
	Address:	3003 Tasman Drive, HF 195	Phone:	415.512.4292
	City, State, Zip:	Santa Clara, CA 95054	Fax:	415.856.0810
	Phone:	408.654.7400	E-mail:	abudiman@svbank.com
	Fax:	408.654.7377		
	Type of Account:	Checking, CDs		
	Account number:	[***]		

SUBSIDIARIES

Fluidigm Singapore Pte. Ltd.
Fluidigm KK
Fluidigm Europe BV
Fluidigm France SARL
Fluidigm UK Limited

PRIOR NAMES

Mycometrix

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

LITIGATION AND ADMINISTRATIVE PROCEEDINGS

On June 5, 2008, Applied Biosystems Inc. sent a “cease and desist” letter with respect to the Company's BioMark System in view of lacking rights to U.S. Patent No. 6,814,934 (“the '934 patent”) and corresponding international patents owned by Applera Corporation. In response, on June 9, 2008, the Company filed a Complaint in the United States District Court for the Southern District of New York, seeking a declaratory judgment that the Company is not directly or indirectly infringing the '934 patent, and that the claims of the '934 patent are invalid. Defendants' response to the Complaint was extended for several months and on December 26, 2008, filed their Answer and counterclaimed that the Company's actions constituted infringement of the ‘934 patent. However, shortly thereafter the parties mutually agreed to withdraw the litigation without prejudice. The Court signed a Stipulation and Order of Dismissal on January 15, 2009. Fluidigm Corp. v. Applera Corp. and Applied Biosystems Inc., Civil Action No. 08 Civ. 5248 (S.D.1V.Y.)

BUSINESS PREMISES

	Each Location Address where Lighthouse Capital Partners has financed assets:		**Landlord/Property Management Information:**	
Current Headquarters (Location 1)	Contact Name: Address: City, State, Zip: Phone: Fax:	Vikram Jog 7000 Shoreline Court, Suite 100 South San Francisco, CA 94080 (650) 226-6000 (650) 871-7152	Contact Name: Company Name: Address: City, State, Zip: Phone: Fax:	Bob Farrell, Controller Facility Operations Oscient Pharmaceuticals 1000 Winter Street Waltham, MA 02451 (781) 398-2604 (781) 398-2350
			Contact Name: Company Name: Address: City, State, Zip: Phone: Fax:	Stephen Richardson Alexandria Real Estate Equities, Inc. 2929 Campus Drive, Suite 400-A San Mateo, CA 94403 (650) 286-1200 (650) 286-1256
Location 2	Contact Name: Company Name: Address: City, State, Zip: Phone: Fax:	Mr. Takeshi Iwabuchi Fluidigm KK (Sales office) Level 5 Ginza TK Bldg, 1-1-7 Shintomi Chuo-Ku, Tokyo, 104-0041 Japan +813-3555-2351 +813-3555-2353	Contact Name: Company Name: Address: Phone: Fax:	Mr. Jyun Kusakabe Sankou estate K.K Shibuyanomurasyouken building 1-14-16 Shibuya, Shibuya-Ku, Tokyo, 150-0002 JAPAN +813-3409-1411 +813-3409-1413
Location 3	Contact Name: Company Name: Address: City, State, Zip: Phone: Fax:	 Fluidigm KK (Sales Office) Level 3-123 Soukendoshomachi bldg 2-1-10 Doshomachi, Chuo-Ku, Osaka-Shi, Osaka 541-0045 JAPAN Osaka +816-6220-0500 +816-6220-0660	Contact Name: Company Name: Address: Phone: Fax:	Ms. Akemi Minamino K.K. HIT Level 25 Osakaekimae daisan bldg 1-1-3 Umeda, Kita-Ku, Osaka-Shi Osaka 530-0001 JAPAN +816-6345-1210 +816-6347-0660
Location 4	Contact Name: Company Name: Address: City, State, Zip: Phone: Fax:	Grace Yow Fluidigm Singapore Block 1026, #07-3532 Tai Seng Avenue Singapore 534413 65 68587318 65 68587311	Contact Name: Company Name: Address: City, State, Zip:	Phoa Cheng Han JTC Corporation The JTC Summit, 8 Jurong Town Hall Road Singapore 609434

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

AMENDMENT NO. 07

Dated May 19, 2009

TO

that certain Loan and Security Agreement No. 4561
dated as of March 29, 2005, as amended ("*Agreement*"), by and between
LIGHTHOUSE CAPITAL PARTNERS V, L.P. ("*Lender*") and
FLUIDIGM CORPORATION ("*Borrower*").

(All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Agreement.)

Without limiting or amending any other provisions of the Agreement, Lender and Borrower agree to the following:

Section 7.10 of the Agreement shall be deleted in its entirety and replaced with the following:

7.10 Deposit and Securities Accounts. Maintain any deposit accounts or accounts holding securities owned by Borrower except accounts in which Lender has obtained a perfected first priority security interest with the exception of (i) account number [***] with Silicon Valley Bank or a successor account with Wells Fargo Bank securing a letter of credit in favor of Borrower's landlord in an amount not to exceed $125,000 in principal amount; or (ii) account number [***] with Wells Fargo Bank securing a letter of credit in favor of Borrower's landlord in an amount not to exceed $137,527 in principal amount; or (iii) account number [***] with respect to its payroll accounts at Wells Fargo Bank.

Except as amended hereby, the Agreement remains unmodified and unchanged.

BORROWER:

FLUIDIGM CORPORATION

By: /s/ Vikram Jog

Name: Vikram Jog

Title: Chief Financial Officer

LENDER:

LIGHTHOUSE CAPITAL PARTNERS V, L.P.

By: **LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.**, its general partner

By: /s/ Thomas Conneely

Name: Thomas Conneely

Title: Vice President

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

AMENDMENT NO. 08

Dated June 14, 2010

TO

that certain Loan and Security Agreement No. 4561
dated as of March 29, 2005, as amended ("*Agreement*"), by and between
LIGHTHOUSE CAPITAL PARTNERS V, L.P. ("*Lender*") and
FLUIDIGM CORPORATION ("*Borrower*").

THIS AMENDMENT NO. 08 ("*Amendment 08*") to that certain Loan and Security Agreement No. 4561 dated March 29, 2005 (as amended to date, the "*Agreement*") is entered into as of June 14, 2010, by and between **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** ("*Lender*") and **FLUIDIGM CORPORATION**, a Delaware corporation ("*Borrower*").

WHEREAS, Borrower and Lender have previously entered into and amended the Agreement; and

WHEREAS, the Commitment Termination Date has passed; and

WHEREAS, Borrower has requested Lender provide principal forbearance from March 1, 2010 through February 28, 2011 and otherwise restructure the terms of the Loans as set forth herein; and

WHEREAS, Lender has agreed to do so subject to all of the terms and conditions hereof and of the Agreement;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants herein contained, the parties hereby agree to modify the Agreement and to perform such other covenants and conditions as follows:

(All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Agreement)

I. **Section 1.1**, the following definitions shall be added to the Agreement:

"*Amended and Restated Warrants*" mean the Warrants in favor of Lender to purchase securities of Borrower, substantially in the form of ***Exhibit C-5*** attached to Amendment 08.

"*Amendment 08*" means Amendment No. 08 to the Agreement, dated as of June 14, 2010, by and between Lender and Borrower.

"*Amendment 08 Note*" means that Amended and Restated Secured Promissory Note in the form of ***Exhibit B-4*** attached to Amendment 08.

"*Amendment 08 Warrant*" means the Warrant in favor of Lender to purchase securities of Borrower, substantially in the form of ***Exhibit C-4*** attached to Amendment 08.

"*Prior Warrants*" mean the previously executed Warrants in favor of Lender to purchase securities of Borrower, described as follows: (i) Series D Warrant dated March 29, 2005, (ii) Series E Warrant dated February 15, 2008, and (iii) Series E (or Series F) Warrant dated March 25, 2009.

II. **Section 1.1**, the following definitions of the Agreement shall be deleted in its entirety and replaced with the following:

"*Disclosure Schedule*" means the Disclosure Schedule delivered to Lender in connection with the execution and delivery of Amendment No. 08.

"*Note*" means **(i)** in connection with Advances under Commitment One, Secured Promissory Notes in the form of ***Exhibit B***, **(ii)** in connection with Advances under Commitment Two, Secured Promissory Notes in the form of ***Exhibits B-2*** to Amendment 04, **(iii)** in connection with Amendment 06, the Amendment 06 Note, and **(iv)** in connection with Amendment 08, the Amendment 08 Note.

"*Permitted Indebtedness*" means: **(i)** the Loan; **(ii)** unsecured trade debt incurred in the ordinary course of Borrower's business; **(iii)** Indebtedness secured by clause (ii) and (v) of Permitted Liens; **(iv)** [intentionally omitted]; **(v)** Indebtedness existing as of the date hereof and listed on the Disclosure Schedule; **(vi)** Indebtedness arising from the endorsement of negotiable instruments for deposits or

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

collections or similar transactions in the ordinary course of business; **(vii)** other Indebtedness consisting of letters of credit and reimbursement obligations in an amount not to exceed $250,000; **(viii)** Indebtedness of (A) Borrower to any Subsidiary that is unsecured, (B) one Subsidiary to another Subsidiary, or (C) any Subsidiary to Borrower in an amount not to exceed $4,500,000 in the aggregate; **(ix)** other Indebtedness in an outstanding principal amount not to exceed $150,000 in the aggregate; and (x) Indebtedness consisting of accounts receivable financing in a principal amount not to exceed $7,000,000 that is secured by a lien otherwise permitted by clause (xiii) of the definition of Permitted Liens; and **(xi)** Indebtedness incurred in connection with the extension, renewal or refinancing of any Indebtedness of the type described in clauses (i) through (x) above, provided that the principal amount of such Indebtedness does not increase other than any reasonable premium in connection therewith. Notwithstanding the foregoing, the restrictions on Indebtedness for Subordinated Indebtedness and referenced in clause (v) of the definition of Permitted Liens shall cease at the effective date of a public offering of Borrower's capital stock which results in proceeds of at least $25,000,000.

"*Permitted Liens*" means: **(i)** Liens in favor of Lender; **(ii)** Liens disclosed in the Disclosure Schedule as amended to the date hereof; **(iii)** Liens for taxes, fees, assessments or other governmental charges or levies not delinquent or being contested in good faith by appropriate proceedings, that do not jeopardize Lender's interest in any Collateral; **(iv)** Liens to secure payment of worker's compensation, employment insurance, old age pensions or other social security obligations of Borrower on which Borrower is current and are in the ordinary course of its business; provided none of the same diminish or impair Lender's rights and remedies respecting the Collateral; and **(v)** Liens upon or in any equipment (including any accessions, attachments, replacements, improvements or proceeds thereto) acquired or held by Borrower to secure the purchase price of such equipment or Indebtedness incurred solely for the purposes of financing such equipment, provided that the aggregate outstanding principal amount of all such financing shall not exceed $500,000, **(vi)** license or sublicenses of Intellectual Property granted in the ordinary course of business; **(vii)** banker's Liens, rights of setoff and similar Liens incurred on deposit and securities accounts in the ordinary course of business; **(viii)** Liens arising from judgments in circumstances not constituting and Event of Default; **(ix)** Liens in favor of customs and revenue authorities arising as a matter of law to secure payments of customs duties in connections with the importation of goods; (x) Liens on insurance proceeds in favor of insurance companies granted solely as security for financed premiums; **(xi)** carriers', warehousemen's, mechanics', landlords', materialmen's, repairmen's or other similar Liens arising in the ordinary course of business which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings; **(xii)** Liens with respect to cash collateral to secure Indebtedness otherwise permitted pursuant to clause (vii) of the definition of Permitted Indebtedness; **(xiii)** first priority Liens on Borrower's accounts receivable and related contract rights giving rise to such accounts receivable, cash, cash equivalents, deposit accounts, investment accounts and the proceeds thereof in favor of a reputable institutional single third party lender providing financing on commercially reasonable terms based upon a percentage of the aggregate amount of such accounts receivables, provided that the principal amount of such Indebtedness shall not exceed $7,000,000; provided further that such third party lender and Lender enter into a mutually satisfactory intercreditor agreement and (xiv) Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clauses (i) through (xiii) above, provided that any extension, renewal, or replacement Lien shall be limited to the collateral securing the existing Lien and the principal amount of such Indebtedness does not increase other than any reasonable premium in connection therewith.

"*Warrant*" means (i) all Warrants issued by Borrower to Lender prior to the date of Amendment 04, (ii) the Commitment Two Warrant, (iii) the Amendment 06 Warrant, (iv) the Amendment 08 Warrant and (v) the Amended and Restated Warrants.

III. Conditions Precedent to Amendment 08. The obligation of Lender to enter into Amendment 08 is subject the satisfaction of each of the following conditions:

(a) This Amendment 08, duly executed by Borrower.

(b) The Amendment 08 Warrant, to be issued to Lender duly executed by Borrower.

(c) The Amended and Restated Warrants, to be issued to Lender duly executed by Borrower.

(c) The Amendment 08 Note.

(d) Delivery to Lender of an officer's certificate of Borrower with copies of the following documents attached: **(i)** the certificate of incorporation and by-laws or other organizational documents of Borrower certified by Borrower as being in full force and effect as of the date of Amendment 08, **(ii)** incumbency and representative signatures, and **(iii)** resolutions authorizing the execution and delivery of Amendment 08 and each of the other Loan Documents.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(e) Delivery to Lender of a good standing certificate from Borrower's state of incorporation or formation and the state in which Borrower's principal place of business is located, together with certificates of the applicable governmental authorities stating that Borrower is in compliance with the franchise tax laws of each such state, each dated as of a recent date.

(f) Borrower has obtained all necessary consents of shareholders, members, and other third parties with respect to the execution, delivery and performance of the Agreement, Amendment 06, the Amendment 06 Warrant, and the other Loan Documents.

(g) Borrower shall have satisfied all the conditions set forth in **Section 3** of the Agreement.

IV. Amendment, Restatement and Replacement of the Notes.

The previously funded Notes shall be amended and restated in their entirety with a single note in the form of the Amendment 08 Note and Lender agrees to return the original previously funded Notes to Borrower for cancellation.

V. Amendment, Restatement and Replacement of Prior Warrants.

The Prior Warrants shall be replaced in their entirety with the Amended and Restated Warrants.

VI. Further Terms and Conditions of this Amendment 08.

1. Reaffirmation. Borrower reaffirms, in all material respects, the representations and warranties made to Lender in the Loan and Security Agreement as of the date of Amendment 08 as though fully set forth herein, unless such representations and warranties relate to a specific date, in which case Borrower reaffirms, in all material respects, such representations and warranties as of such date.
2. Expenses: All expenses incurred in connection with the preparation and negotiation of this Amendment 08 are for Borrower's account.
3. Representations and Warranties of Borrower. Borrower warrants and represents, as a significant material inducement to Lender to enter hereinto, that: (i) no Events of Default have occurred and are continuing that have not been disclosed to Lender by Borrower in writing; (ii) it is not and has no reason to believe it may be named as a party to any judicial or administrative proceeding, litigation or arbitration, and has not received any written communication from any person or entity (whether private or governmental) threatening or indicating the same, except to the extent that any such written communication could not reasonably be expected to result in a material adverse effect on Borrower's business; and (iii) it is in full compliance with Section 7.10 of the Loan and Security Agreement.
4. No Control. Borrower warrants and represents, as a significant material inducement to Lender to enter hereinto, that none of Lender nor any affiliate, officer, director, employee, agent, or attorney of Lender, have at any time, from Borrower's date of formation through to the date hereof, (i) exercised management or other control over the Borrower, (ii) exercised undue influence over Borrower or any of its officers, employees or directors, (iii) made any representation or warranty, express or implied, to any party on behalf of Borrower, (iv) entered into any joint venture, agency relationship, employment relationship, or partnership with Borrower, (v) directed or instructed Borrower on the manner, method, amount, or identity of payee of any payment made to any creditor of Borrower, and further, Borrower warrants and represents that by entering hereinto with Lender has not, are not and will not have engaged in any of the foregoing.
5. Integration Clause. This Agreement represents and documents the entirety of the agreement and understanding of the parties hereto with respect to its subject matter. All prior understandings, whether oral or written, other than the Loan Documents, are hereby merged hereinto. **NEITHER THE LOAN AND SECURITY AGREEMENT NOR THIS AGREEMENT MAY BE MODIFIED EXCEPT BY A WRITING SIGNED BY LENDER AND BORROWER**. Each provision hereof shall be severable from every other provision when determining its legal enforceability such that Lender's rights and remedies under this Agreement and the Loan Documents may be enforced to the maximum extent permitted under applicable law. This Agreement shall be binding upon, and inure to the benefit of, each party's respective permitted successors and assigns. This Agreement may be executed in counterpart originals, all of which, when taken together, shall constitute one and the same original document. No provision of any other document between Lender and Borrower shall limit the effectiveness hereof or the rights and remedies of Lender against Borrower. In the event of any contradiction or inconsistency among the terms and conditions of this Agreement or any Loan Document, the interpretation most favorable to the interests of Lender shall prevail.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

limit the effectiveness hereof or the rights and remedies of Lender against Borrower. In the event of any contradiction or inconsistency among the terms and conditions of this Agreement or any Loan Document, the interpretation most favorable to the interests of Lender shall prevail.

Except as amended hereby, the Agreement remains unmodified and unchanged.

BORROWER:

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington

Name: Gajus V. Worthington

Title: CEO

LENDER:

LIGHTHOUSE CAPITAL PARTNERS V, L.P.

By: **LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,** its general partner

By: /s/ Thomas Conneely

Name Thomas Conneely

Title: Vice President

Attachments:
Exhibit B-4 – Amendment 08 Note
Exhibit C-4 – Amendment 08 Warrant
Exhibit C-5 – Amended and Restated Warrants
Exhibit E-4 – Incumbency Certificate
Schedule 1 – Disclosure Schedule

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT B-4
(AMENDMENT 08)

$12,960,149

AMENDED AND RESTATED SECURED PROMISSORY NOTE

This AMENDED AND RESTATED SECURED PROMISSORY NOTE (this "*Note*") is dated as of March 1, 2010, by **FLUIDIGM CORPORATION** ("*Borrower*") in favor of **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** (collectively with its assigns, "*Lender*"), and its assigns (collectively, "*Holder*")" amends and restates (but does not novate) in its entirety the Amendment 06 Note, with reference to the following:

FOR VALUE RECEIVED, Borrower promises to pay in lawful money of the United States, to the order of Lender, at 500 Drake's Landing Road, Greenbrae, California 94904, or such other place as Lender may from time to time designate ("*Lender's Office*"), the sum of $12,960,149 (the "*Advance*") plus all other monies advanced under or owing on account of the Advance evidenced hereby under Commitment One and Commitment Two of Loan and Security Agreement No. 4561 between Borrower and Lender dated March 29, 2005, as amended (the "*Loan Agreement*"), including interest on the unpaid balance of the Advance at the Basic Rate accruing from the Funding Date, and all other amounts due or to become due hereunder according to the terms hereof. Capitalized terms used and not otherwise defined herein are defined in the Loan Agreement.

"*Basic Rate*" means a fixed *per annum* rate of interest equal 13.5%.

"*Final Payment*" means $2,112,500, due and payable on the earlier of (i) March 1, 2012 or (ii) the Maturity Date.

"*Loan Commencement Date*" means March 1, 2011.

"*Maturity Date*" means the last day of the Repayment Period, or if earlier, the date of prepayment under the Note.

"*Payment Date*" means the first day of each calendar month.

"*Prepayment Fee*" means 1.0% of the outstanding principal amount being prepaid.

"*Repayment Period*" means the period beginning on the Loan Commencement Date and continuing for 24 calendar months.

"*Restructure Fee*" means $150,000, due and payable on the earlier of (i) March 1, 2012 or (ii) the Maturity Date.

VII. Repayment. Borrower shall pay principal and interest due hereunder from the Funding Date, until this Note is paid in full, on each Payment Date pursuant to the terms of the Loan Agreement and this Note. Prior to the Loan Commencement Date, Borrower shall pay to Lender, monthly in advance on each Payment Date, interest calculated using the Basic Rate. Beginning on the Loan Commencement Date and on each Payment Date thereafter during the Repayment Period, Borrower shall make equal installments of principal and interest in advance, calculated at the Basic Rate. On the Maturity Date, Borrower shall pay any and all amounts outstanding hereunder.

VIII. Interest. Interest not paid when due will, to the maximum extent permitted under applicable law, become part of principal, at Lender's option, and thereafter bear like interest as principal. Interest shall be computed on the basis of a 360 day year. All Obligations not paid when due shall bear interest at the Default Rate unless waived in writing by Lender. All amounts paid hereunder will be applied to the Obligations in Lender's discretion and as provided in the Loan Agreement.

IX. Voluntary Prepayment. Borrower may prepay the Note if and only if Borrower pays to Lender (i) the outstanding principal amount of this Note and any unpaid accrued interest (ii) the Final Payment, (iii) the Restructure Fee, (iv) the Prepayment Fee, and (v) all other sums, if any, due or to become due and payable hereunder with respect to this Note.

Fee, (iv) the Prepayment Fee, and (v) all other sums, if any, due or to become due and payable hereunder with respect to this Note.

X. Collateral. This Note is secured by the Collateral.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

XI. Waivers. Borrower, and all guarantors and endorsers of this Note, regardless of the time, order or place of signing, hereby waive notice, demand, presentment, protest, and notices of every kind, presentment for the purpose of accelerating maturity, diligence in collection to the fullest extent permitted by law.

XII. Choice of Law; Venue. THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. EACH OF BORROWER AND LENDER HEREBY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE CITY AND COUNTY OF SAN FRANCISCO, STATE OF CALIFORNIA. BORROWER AND LENDER EACH HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS NOTE. EACH PARTY FURTHER WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION IN WHICH A JURY TRIAL HAS BEEN WAIVED WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED.

XIII. Miscellaneous. THIS NOTE MAY BE MODIFIED ONLY BY A WRITING SIGNED BY BORROWER AND LENDER.

Each provision hereof is severable from every other provision hereof and of the Loan Agreement when determining its legal enforceability. Sections and subsections are titled for convenience, and not for construction. “Hereof,” “herein,” “hereunder,” and similar words refer to this Note in its entirety. “Or” is not necessarily exclusive. “Including” is not limiting. The terms and conditions hereof inure to the benefit of and are binding upon the parties' respective permitted successors and assigns. This Note is subject to all the terms and conditions of the Loan Agreement.

IN WITNESS WHEREOF, Borrower has caused this Note to be executed by a duly authorized officer as of the day and year first above written.

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington

Name: Gajus V Worthington

Title: CEO

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT C-4

AMENDMENT 08 WARRANT

Incorporated by reference to Exhibit 4.6A to the registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on December 3, 2010.

1.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT C-5

AMENDED AND RESTATED WARRANTS

Incorporated by reference to Exhibits 4.6B, 4.6C, and 4.6D to the registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on December 3, 2010.

1.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT E-4

Incumbency Certificate

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

INCUMBENCY CERTIFICATE

The undersigned, William M. Smith, hereby certifies that:

1. He is the duly elected and acting Vice President, Legal Affairs, General Counsel and Secretary of **FLUIDIGM CORPORATION**, a Delaware corporation (the "*Company*"),

2. That on the date hereof, each person listed below holds the office in the Company indicated opposite his or her name and that the signature appearing thereon is the genuine signature of each such person:

NAME	OFFICE	SIGNATURE
Gajus V. Worthington	President and Chief Executive Officer	/s/ Gajus V. Worthington
Vikram Jog	Chief Financial Officer	/s/ Vikram Jog

3. Attached hereto as ***Exhibit A*** is a true and correct copy of the Certificate of Incorporation of the Company, as amended, as in effect as of the date hereof.

4. Attached hereto as ***Exhibit B*** is a true and correct copy of the Bylaws of the Company, as amended, as in effect as of the date hereof.

5. Attached hereto as ***Exhibit C*** is a copy of the resolutions of the Board of Directors of the Company authorizing and approving the Company's execution, delivery and performance of a loan facility with Lighthouse Capital Partners V, L.P.

IN WITNESS WHEREOF, the undersigned has executed this Incumbency Certificate on June __, 2010.

FLUIDIGM CORPORATION

By: /s/ William M. Smith

Name: William M. Smith

Title: Vice President, Legal Affairs, General Counsel and Secretary

I, the President and Chief Executive Officer of the Company, do hereby certify that William M. Smith is the duly qualified, elected and acting Vice President, Legal Affairs, General Counsel and Secretary of the Company and that the above signature is his genuine signature.

IN WITNESS WHEREOF, the undersigned has executed and delivered this Incumbency Certificate on June __, 2010.

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington

Name: Gajus V. Worthington

Title: President and Chief Executive Officer

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Schedule 1

DISCLOSURE SCHEDULE

EXISTING LIENS
(OTHER THAN LENDER)

UCC Filing #	Secured Party	Collateral
74924154	U.S. Bancorp	Financed Equipment with a value not exceeding $50,000

DEPOSIT AND SECURITIES ACCOUNTS

	Account Information:	Contact Information for Account:
Account Number 1	Company Name: Wells Fargo Bank Address: 420 Montgomery Street, 9th Floor City, State, Zip: San Francisco, CA 94104 Phone: Fax: Type of Account: Checking, Payroll Account number: [***], [***], [***]	Contact Name: Albina Khazan Phone: 415.396 2961 Fax: 415.975.7573 E-mail: albina.khazan@wellsfargo.com
Account Number 2	Company Name: Morgan Stanley Address: 555 California Street, Suite 1400 City, State, Zip: San Francisco, CA 94104 Phone: 415.576.2016 Fax: 415.576.2060 Type of Account: Investment Account number: [***]	Contact Name: Thomas Pilero Phone: 415-576-2016 Fax: 415-576-2060 E-mail: Thomas.Piliero@morganstanley.com
Account Number 3	Company Name: Silicon Valley Bank Address: 3003 Tasman Drive, HF 195 City, State, Zip: Santa Clara, CA 95054 Phone: 408.654.7400 Fax: 408.654.7377 Type of Account: Checking, CDs Account number: [***]	Contact Name: Antony Budiman Phone: 415.512.4292 Fax: 415.856.0810 E-mail: abudiman@svbank.com

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SUBSIDIARIES

Fluidigm Singapore Pte. Ltd.
FluidigmKK
Fluidigm Europe B V
Fluidigm France SARL
Fluidigm UK Limited

PRIOR NAMES

Mycometrix

LITIGATION AND ADMINISTRATIVE PROCEEDINGS

On June 5, 2008, Applied Biosystems Inc. sent a "cease and desist" letter with respect to the Company's BioMark System in view of lacking rights to U.S. Patent No. 6,814,934 ("the '934 patent") and corresponding international patents owned by Applera Corporation. In response, on June 9, 2008, the Company filed a Complaint in the United States District Court for the Southern District of New York, seeking a declaratory judgment that the Company is not directly or indirectly infringing the '934 patent, and that the claims of the '934 patent are invalid. Defendants' response to the Complaint was extended for several" months and on December 26, 2008, filed their Answer and counterclaimed that the Company's actions constituted infringement of the '934 patent. However, shortly thereafter the parties mutually agreed to withdraw the litigation without prejudice. The Court signed a Stipulation and Order of Dismissal on January 15, 2009. *Fluidigm Corp. v. Applera Corp. and Applied Biosystems Inc., Civil Action No. 08 Civ. 5248 (S.DNY.)*

BUSINESS PREMISES

	Each Location Address where Lighthouse Capital Partners has financed assets:	**Landlord/Property Management Information:**
Current Headquarters (Location 1)	Contact Name: Vikram Jog Address: 7000 Shoreline Court, Suite 100 City, State, Zip: South San Francisco, CA 94080 Phone: (650) 266-6000 Fax: (650) 871-7192	Contact Name: Stephen Richardson Company Name: Alexandria Real Estate Equities, Inc. Address: 1700 Owens Street, Suite 500 City, State, Zip: San Francisco, CA 94158 Phone: -415.554.8844 Fax: -415.554.0142
Location 2	Contact Name: Mr. Takeshi Iwabuchi Company Name: Fluidigm KK (Sales office) Address: Level 5 Ginza TK Bldg, 1-1-7 Shintomi City, State, Zip: Chuo-Ku, Tokyo, 104-0041 Japan Phone: +813-3555-2351 Fax: +813-3555-2353	Contact Name: Mr. Jyun Kusakabe Company Name: Sankou estate K.K Address: Shibuyanomurasyouken building 1-14-16 Shibuya, Shibuya-Ku, Tokyo, 150-0002 JAPAN Phone: +813-3409-1411 Fax: +813-3409-1413

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Location 3	Contact Name: Company Name: Fhiidigm KK (Sales Office) Address: Level 3-123 Soukendoshomachi bldg 2-1-10 Doshomachi, Chuo-Ku, Osaka-Shi, Osaka 541-0045 JAPAN City, State, Zip: Osaka Phone: +816-6220-0500 Fax: +816-6220-0660	Contact Name: Ms. Akemi Minamino Company Name: K.K. HIT Address: Level 25 Osakaekimae daisan bldg 1-1-3 Umeda, Kita-Ku, Osaka-Shi Osaka 530-0001 JAPAN Phone: +816-6345-1210 Fax: +816-6347-0660
Location 4	Contact Name: Grace Yow Company Name: Fluidigm Singapore Address: Block 1026, #07-3532 Tai Seng Avenue City, State, Zip: Singapore 534413 Phone: 65 68587318 Fax: 65 68587311	Contact Name: Officer in Charge Company Name: JTC Corporation Address: The JTC Summit, 8 Jurong Town Hall Road City, State, Zip: Singapore 609434 Phone: 65 6560 0056 Fax: 65 6565 5301
Location 5	Contact Name: Grace Yow Company Name: Fluidigm Singapore Address: Units #10-10, Helios 11 Biopolis Way City, State, Zip: Singapore 138667 Phone: 65 68587318 Fax: 65 68587311	Contact Name: Officer in Charge Company Name: JTC Corporation Address: The JTC Summit, 8 Jurong Town Hall Road City, State, Zip: Singapore 609434 Phone: 65 6560 0056 Fax: 65 6565 5301

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

NEITHER THIS WARRANT NOR THE SHARES OF CAPITAL STOCK ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "*1933 ACT*"), OR ANY APPLICABLE STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED UNLESS SUCH SALE OR TRANSFER IS IN ACCORDANCE WITH THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS OR THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO THE COMPANY, TO THE EFFECT THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS.

AMENDED AND RESTATED PREFERRED STOCK PURCHASE WARRANT

Warrant No. WPD-5

Number of Shares: 106,122
Series D-1 Preferred Stock

FLUIDIGM CORPORATION

Effective as of June 14, 2010

Void after March 29, 2014

1. Issuance. This Amended and Restated Preferred Stock Purchase Warrant (the "*Warrant*") is issued to **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** by **FLUIDIGM CORPORATION**, a Delaware corporation (hereinafter with its successors called the "*Company*") and amends and restates in its entirety that certain Warrant dated as of March 29, 2005, by and between Holder and Company.

2. Purchase Price; Number of Shares.

(a) The registered holder of this Warrant (the "*Holder*"), commencing on the date hereof, is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company, at a price per share equal to the Purchase Price, 106,122 fully paid and nonassessable shares of the Company's Series D-1 Preferred Stock, $0.0035 par value (the "*Preferred Stock*").

In addition to other terms which may be defined herein, the following terms, as used in this Warrant, shall have the following meanings:

(i) "*Next Round Financing*" means a sale of shares of Next Round Stock for cash, but does not include the issuance of any other instrument or other security convertible into or exchangeable for preferred stock, or the issuance of any option, warrant or right to acquire any preferred stock or any security convertible or exchangeable for preferred stock.

(ii) "*Next Round Stock*" means the class or series of the Company's preferred equity securities issued in connection with the Next Round Financing.

(iii) "*Purchase Price*" means the lesser of (i) the lowest price per share paid by an investor for a share of Next Round Stock, or (ii) $7.00.

Any capitalized term not defined herein shall have the meaning as set forth in the Loan Agreement.

Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided. The person or persons in whose name or names any certificate representing shares of Preferred Stock is issued hereunder shall be deemed to have become the

holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

3. Payment of Purchase Price. The Purchase Price may be paid (i) in cash or by check, (ii) by the surrender by the Holder to the Company of any promissory notes or other obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus accrued interest to the date of surrender, or (iii) by any combination of the foregoing.

4. Net Issue Election. The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares of Preferred Stock equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company, with the net issue election notice annexed hereto duly executed, at the principal office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Preferred Stock as is computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

where: X = the number of shares of Preferred Stock to be issued to the Holder pursuant to this **Section 4**.

Y = the number of shares of Preferred Stock covered by this Warrant in respect of which the net issue election is made pursuant to this **Section 4**.

A = the Fair Market Value (defined below) of one share of Preferred Stock, as determined at the time the net issue election is made pursuant to this **Section 4**.

B = the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this **Section 4**.

"*Fair Market Value*" of a share of Preferred Stock (or fully paid and nonassessable shares of the Company's common stock, $0.0035 par value (the "*Common Stock*") if the Preferred Stock has been automatically converted into Common Stock) as of the date that the net issue election is made (the "*Determination Date*") shall mean:

(i) If the net issue election is made in connection with and contingent upon the closing of the sale of the Company's Common Stock to the public in a public offering pursuant to a Registration Statement under the 1933 Act (a "*Public Offering*"), and if the Company's Registration Statement relating to such Public Offering ("*Registration Statement*") has been declared effective by the Securities and Exchange Commission, then the initial "Price to Public" specified in the final prospectus with respect to such offering multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible.

(ii) If the net issue election is not made in connection with and contingent upon a Public Offering, then as follows:

(a) If traded on a securities exchange or the Nasdaq National Market, the fair market value of the Common Stock shall be deemed to be the average of the closing or last reported sale prices of the Common Stock on such exchange or market over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible;

(b) If otherwise traded in an over-the-counter market, the fair market value of the Common Stock shall be deemed to be the average of the closing ask prices of the Common Stock over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock

shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible; and

(c) If there is no public market for the Common Stock, then fair market value shall be determined in good faith by the Company's Board of Directors.

5. Partial Exercise. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. Fractional Shares. In no event shall any fractional share of Preferred Stock be issued upon any exercise of this Warrant. If, upon exercise of this Warrant in its entirety, the Holder would, except as provided in this **Section 6**, be entitled to receive a fractional share of Preferred Stock, then the Company shall issue the next higher number of full shares of Preferred Stock, issuing a full share with respect to such fractional share.

7. Expiration Date; Automatic Exercise. This Warrant shall expire at the close of business on March 29, 2014, and shall be void thereafter (the "*Expiration Date*"). Notwithstanding the term of this Warrant fixed pursuant to this **Section 7,** and provided Holder has received advance written notice of at least twenty (20) days and has not earlier exercised this Warrant, and provided this Warrant has not been assumed by the successor entity (or parent thereof), upon the consummation of a Merger (as defined below), this Warrant shall automatically be exercised pursuant to **Section 4** hereof, without any action by Holder. "*Merger*" means: (i) a sale of all or substantially all of the Company's assets to an Unaffiliated Entity (as defined below), or (ii) the merger, consolidation or acquisition of the Company with, into or by an Unaffiliated Entity (other than a merger or consolidation for the principle purpose of changing the domicile of the Company or a bona fide round of preferred stock equity financing), that results in the Company's shareholders immediately prior to such merger, consolidation, or acquisition holding, immediately thereafter, less than a majority of the outstanding voting securities of the successor corporation or its parent. "*Unaffiliated Entity*" means any entity that is owned or controlled by parties who own less than twenty percent (20%) of the combined voting power of the voting securities of the Company immediately prior to such merger or sale of assets, consolidation or acquisition. Notwithstanding the foregoing, in the event that any outstanding warrants to purchase equity securities of the Company (it being acknowledged and agreed that options to acquire common stock issued to officers, directors, employees and consultants shall not be deemed "warrants") are assumed by the successor entity of a Merger (or parent thereof), this Warrant shall also be similarly assumed and the automatic exercise provision in this **Section 7** shall have no effect. The Company agrees to give the Holder written notice promptly after it has entered into a definitive agreement relating to any proposed Merger and written notice of termination of any definitive agreement relating to any proposed Merger. Notwithstanding anything to the contrary in this Warrant, (i) the Holder may expressly make any voluntary exercise of this Warrant contingent on, and effective immediately prior to, the consummation of such Merger and (ii) any automatic exercise of this Warrant in connection with a Merger shall be conditioned on consummation of such Merger and shall be effective immediately prior thereto.

8. Reserved Shares; Valid Issuance. The Company covenants that it will at all times from and after the date hereof reserve and keep available such number of its authorized shares of Preferred Stock and Common Stock free from all preemptive or similar rights therein, as will be sufficient to permit, respectively, the exercise of this Warrant in full and the conversion into shares of Common Stock of all shares of Preferred Stock receivable upon such exercise. The Company further covenants that such shares as may be issued pursuant to such exercise and/or conversion will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. Stock Splits and Dividends. If after the date hereof the Company shall subdivide the Preferred Stock, by split-up or otherwise, or combine the Preferred Stock, or issue additional shares of Preferred Stock in payment of a stock dividend on the Preferred Stock, the number of shares of Preferred Stock issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. Adjustments for Diluting Issuances. The antidilution rights applicable to the Series D-1 Preferred Stock of the Company are set forth in the Third Amended and Restated Certificate of Incorporation, as amended from time to time (the "*Certificate*"), a true and complete copy of which in its current form is attached hereto as Exhibit A. Such rights shall not be restated, amended or modified in any manner which affects the Holder differently than the holders of outstanding Series D-1 Preferred Stock without such Holder's prior written consent. The Company shall provide the Holder hereof with any restatement, amendment or modification to the Certificate promptly after the same has been made.

11. Mergers and Reclassifications. **(a)** Except as set forth in **Section 7**, If after the date hereof the Company shall enter into any Reorganization (as hereinafter defined), then, as a condition of such Reorganization, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such Reorganization by a holder of the number of shares of Preferred Stock which might have been purchased by the Holder immediately prior to such Reorganization, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof (including without limitation, provisions for the adjustment of the Purchase Price and the number of shares issuable hereunder and the provisions relating to the net issue election) shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof. For the purposes of this **Section 11**, the term "*Reorganization*" shall include without limitation any reclassification, capital reorganization or change of the Preferred Stock (other than as a result of a subdivision, combination or stock dividend provided for in **Section 9** hereof), or any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a merger in which the Company is the surviving corporation and which does not result in any reclassification or change of the outstanding Preferred Stock), or any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company.

(b) Notwithstanding any other provision of this Warrant, in the event of an automatic conversion of the Company's outstanding Series D-1 Preferred Stock into Common Stock in accordance with the Company's Certificate, as in effect from time to time, this Warrant shall thereafter represent the right to acquire for the aggregate Purchase Price (as then in effect) the number of shares of Common Stock into which the number of shares of Preferred Stock issuable upon exercise of this Warrant would have then been convertible.

12. Certificate of Adjustment. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate of the Company's chief financial officer (or other appropriate officer) setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

13. Notices of Record Date, Etc. In the event of:

(**a**) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase, sell or otherwise acquire or dispose of any shares of stock of any class or any other securities or property, or to receive any other right;

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets; or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then in each such event the Company will provide or cause to be provided to the Holder a written notice thereof. Such notice shall be provided at least twenty (20) business days prior to the date specified in such notice on which any such action is to be taken.

14. Market Stand-off. The Holder hereby agrees that such Holder shall not sell or otherwise transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, of any common stock (or other securities) of the Company held by the Holder (other than those included in the registration) during the one hundred eighty (180) day period following the effective date of the registration statement for a Public Offering filed under the 1933 Act (or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The obligations described in this section shall not apply to a registration relating solely to employee benefit plans on Form S-l or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions and may stamp each certificate with a legend with respect to the shares of common stock (or other securities) subject to the foregoing restriction until the end of such one hundred eighty (180) day (or other) period. The Holder agrees to execute a market stand-off agreement with the underwriters in the offering in customary form consistent with the provisions of this section.

15. Representations, Warranties and Covenants. This Warrant is issued and delivered by the Company and accepted by each Holder on the basis of the following representations, warranties and covenants made by the Company:

(a) The Company has all necessary corporate power and authority to issue, execute and deliver this Warrant and to perform its obligations hereunder. This Warrant has been duly authorized issued, executed and delivered by the Company and is the valid and binding obligation of the Company, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy or similar laws relating to the enforcement of creditors' rights generally.

(b) The shares of Preferred Stock issuable upon the exercise of this Warrant have been duly authorized and reserved for issuance by the Company and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable.

(c) The issuance, execution and delivery of this Warrant do not, and the issuance of the shares of Preferred Stock upon the exercise of this Warrant in accordance with the terms hereof will not, (i) violate or contravene the Company's Certificate or by-laws, or any law, statute, regulation, rule, judgment or order applicable to the Company, (ii) violate, contravene or result in a breach or default under any contract, agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound or (iii) require the consent or approval of or the filing of any notice or registration with any person or entity (other than such notices or filings as may be required under applicable securities laws).

(d) As long as this Warrant is, or any shares of Preferred Stock issued upon exercise of this Warrant or any shares of Common Stock issued upon conversion of such shares of Preferred Stock are, issued and outstanding, the Company will provide to the Holder the financial and other information described in that certain Loan and Security Agreement No. 4561 between the Company and Lighthouse Capital Partners V, L.P. dated as of March 29, 2005, as amended.

(e) As of the date hereof, the authorized capital stock of the Company consists of (i) 28,847,292 shares of Common Stock, of which 3,240,108 shares are issued and outstanding and a sufficient number of which are reserved for issuance upon conversion of the Prior Preferred Stock into Common Stock in the event that this Warrant is exercised with respect to Prior Preferred Stock, (ii) 779,220 shares of Series A Preferred Stock, of which 657,132 are issued and outstanding shares, (iii) 1,845,907 shares of Series B Preferred Stock, of which 1,835,354 are issued and outstanding shares, (iv) 4,815,606 shares of Series C Preferred Stock, of which 4,619,039 are issued and outstanding shares, (v) 3,989,217 shares of Series D Preferred Stock, of which 3,771,976 are issued and outstanding shares, (vii) 106,122 shares of Series D-1 Preferred Stock, none of which are issued and outstanding shares, (vii) 7,802,775 shares of Series E Preferred Stock, of which 6,829,104 are issued and outstanding shares, and (ix) 257,108 shares of Series E-1 Preferred Stock, none of which are issued and outstanding shares. The Company has delivered a capitalization table to Holder summarizing the capitalization of the Company, a copy of which is attached hereto as Exhibit B. At the request of Holder, not more than once per calendar quarter, the Company will

provide Holder with a current capitalization table indicating changes, if any, to the number of outstanding shares of common stock and preferred stock.

16. Registration Rights. The Company grants to the Holder all the rights of a "Holder" and a "Warrantholder" under the Company's Ninth Amended and Restated Investors Rights Agreement dated as of November 16, 2009, as amended from time to time (the "*Rights Agreement*"), including, without limitation, the registration rights contained therein, and agrees to amend the Rights Agreement so that (i) the shares of Common Stock issuable upon conversion of the shares of Preferred Stock issuable upon exercise of this Warrant shall be "*Registrable Securities*," and (ii) the Holder shall be a "Holder" and a "Warrantholder" for all purposes of such Rights Agreement.

17. Amendment. The terms of this Warrant may be amended, modified or waived only with the written consent of the Holder and the Company.

18. Representations and Covenants of the Holder. This Warrant has been entered into by the Company in reliance upon the following representations and covenants of the Holder, which by its execution hereof the Holder hereby confirms:

(a) Investment Purpose. The right to acquire Preferred Stock or the Preferred Stock issuable upon exercise of the Holder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Holder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Accredited Investor. Holder is an "accredited investor" within the meaning of Rule 501 of Regulation D, promulgated under the 1933 Act as presently in effect.

(c) Private Issue. The Holder understands (i) that neither the issuance of this Warrant nor the issuance of any shares of the Company's capital stock issuable upon exercise of the Holder's rights contained herein has been registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuances contemplated by this Warrant will be exempt from the registration and qualifications requirements thereof, and (ii) that the Company's reliance on such exemption is predicated on the representations of the Holder set forth in this **Section 18**.

(d) Financial Risk. The Holder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment and has the ability to bear the economic risks of its investment.

19. Notices, Transfers, Etc.

(a) Any notice or written communication required or permitted to be given to the Holder may be given by certified mail or delivered to the Holder at the address most recently provided by the Holder to the Company.

(b) Subject to compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment notice annexed hereto duly executed, for transfer of this Warrant as an entirety by the Holder, the Company shall issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer with respect to a portion of the shares of Preferred Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof, and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

(**c**) In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon

surrender and cancellation of any mutilated Warrant, or (ii) in lieu of any Warrant lost, stolen or destroyed, upon receipt of an affidavit of the Holder or other evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant

20. No Impairment. The Company will not, by amendment of its Certificate or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance of performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder. In no event shall any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other transaction be deemed an "impairment" for purposes of this Section 20 if the shares of the Company's capital stock issuable upon exercise of this Warrant are affected thereby in the same manner as outstanding shares of such capital stock.

21. Governing Law. The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the State of California without giving effect to its principles regarding conflicts of laws.

22. Successors and Assigns. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

23. Business Days. If the last or appointed day for the taking of any action required or the expiration of any rights granted herein shall be a Saturday or Sunday or a legal holiday in California, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

24. Value. The Company and the Holder agree that the value of this Warrant on the date of grant is $100.

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington
Name: Gajus V. Worthington
Title: CEO

Subscription

To: _____

Date: _____

The undersigned hereby subscribes for _____ shares of Preferred Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

Net Issue Election Notice

To: _____ Date: _____

The undersigned hereby elects under **Section 4** to surrender the right to purchase shares of Preferred Stock pursuant to this Warrant. The certificate(s) for such shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

Assignment

For value received _____ hereby sells, assigns and transfers unto

_____

_____

[Please print or typewrite name and address of Assignee]

_____

the within Warrant, and does hereby irrevocably constitute and appoint _____ its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

Dated: _____

_____

Signature

_____

Name for Registration

In the Presence of:

_____

EXHIBIT A

Third Amended and Restated Certificate of Incorporation

Superseded by Exhibit 3.1 to the registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on December 3, 2010.

NEITHER THIS WARRANT NOR THE SHARES OF CAPITAL STOCK ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "*1933 ACT*"), OR ANY APPLICABLE STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED UNLESS SUCH SALE OR TRANSFER IS IN ACCORDANCE WITH THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS OR THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO THE COMPANY, TO THE EFFECT THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS.

AMENDED AND RESTATED PREFERRED STOCK PURCHASE WARRANT

Warrant No. WPD-6

Number of Shares: 85,714
Series E-1 Preferred Stock

FLUIDIGM CORPORATION

Effective as of June 14, 2010

Void after February 15, 2015

1. Issuance. This Amended and Restated Preferred Stock Purchase Warrant (the "*Warrant*") is issued to **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** by **FLUIDIGM CORPORATION**, a Delaware corporation (hereinafter with its successors called the "*Company*") and amends and restates in its entirety that certain Warrant dated as of February 15, 2008, by and between Holder and Company.

2. Purchase Price; Number of Shares.

(a) The registered holder of this Warrant (the "*Holder*"), commencing on the date hereof, is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company, at a price per share equal to the Purchase Price, 85,714 fully paid and nonassessable shares of the Company's Series E-1 Preferred Stock, $0.0035 par value (the "*Preferred Stock*").

In addition to other terms which may be defined herein, the following terms, as used in this Warrant, shall have the following meanings:

(i) "*Next Round Financing*" means a sale of shares of Next Round Stock for cash, but does not include the issuance of any other instrument or other security convertible into or exchangeable for preferred stock, or the issuance of any option, warrant or right to acquire any preferred stock or any security convertible or exchangeable for preferred stock.

(ii) "*Next Round Stock*" means the class or series of the Company's preferred equity securities issued in connection with the Next Round Financing.

(iii) "*Purchase Price*" means the lesser of (i) the lowest price per share paid by an investor for a share of Next Round Stock, or (ii) $7.00.

Any capitalized term not defined herein shall have the meaning as set forth in the Loan Agreement.

Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided. The person or persons in whose name or names any certificate representing shares of Preferred Stock is issued hereunder shall be deemed to have become the

holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

3. Payment of Purchase Price. The Purchase Price may be paid (i) in cash or by check, (ii) by the surrender by the Holder to the Company of any promissory notes or other obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus accrued interest to the date of surrender, or (iii) by any combination of the foregoing.

4. Net Issue Election. The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares of Preferred Stock equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company, with the net issue election notice annexed hereto duly executed, at the principal office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Preferred Stock as is computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

where: X = the number of shares of Preferred Stock to be issued to the Holder pursuant to this **Section 4**.

Y = the number of shares of Preferred Stock covered by this Warrant in respect of which the net issue election is made pursuant to this **Section 4**.

A = the Fair Market Value (defined below) of one share of Preferred Stock, as determined at the time the net issue election is made pursuant to this **Section 4**.

B = the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this **Section 4**.

"*Fair Market Value*" of a share of Preferred Stock (or fully paid and nonassessable shares of the Company's common stock, $0.0035 par value (the "*Common Stock*") if the Preferred Stock has been automatically converted into Common Stock) as of the date that the net issue election is made (the "*Determination Date*") shall mean:

(i) If the net issue election is made in connection with and contingent upon the closing of the sale of the Company's Common Stock to the public in a public offering pursuant to a Registration Statement under the 1933 Act (a "*Public Offering*"), and if the Company's Registration Statement relating to such Public Offering ("*Registration Statement*") has been declared effective by the Securities and Exchange Commission, then the initial "Price to Public" specified in the final prospectus with respect to such offering multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible.

(ii) If the net issue election is not made in connection with and contingent upon a Public Offering, then as follows:

(a) If traded on a securities exchange or the Nasdaq National Market, the fair market value of the Common Stock shall be deemed to be the average of the closing or last reported sale prices of the Common Stock on such exchange or market over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible;

(b) If otherwise traded in an over-the-counter market, the fair market value of the Common Stock shall be deemed to be the average of the closing ask prices of the Common Stock over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock

shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible; and

(c) If there is no public market for the Common Stock, then fair market value shall be determined in good faith by the Company's Board of Directors.

5. Partial Exercise. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. Fractional Shares. In no event shall any fractional share of Preferred Stock be issued upon any exercise of this Warrant. If, upon exercise of this Warrant in its entirety, the Holder would, except as provided in this **Section 6**, be entitled to receive a fractional share of Preferred Stock, then the Company shall issue the next higher number of full shares of Preferred Stock, issuing a full share with respect to such fractional share.

7. Expiration Date; Automatic Exercise. This Warrant shall expire at the close of business on February 15, 2015, and shall be void thereafter (the "*Expiration Date*"). Notwithstanding the term of this Warrant fixed pursuant to this **Section 7,** and provided Holder has received advance written notice of at least twenty (20) days and has not earlier exercised this Warrant, and provided this Warrant has not been assumed by the successor entity (or parent thereof), upon the consummation of a Merger (as defined below), this Warrant shall automatically be exercised pursuant to **Section 4** hereof, without any action by Holder. "*Merger*" means: (i) a sale of all or substantially all of the Company's assets to an Unaffiliated Entity (as defined below), or (ii) the merger, consolidation or acquisition of the Company with, into or by an Unaffiliated Entity (other than a merger or consolidation for the principle purpose of changing the domicile of the Company or a bona fide round of preferred stock equity financing), that results in the Company's shareholders immediately prior to such merger, consolidation, or acquisition holding, immediately thereafter, less than a majority of the outstanding voting securities of the successor corporation or its parent. "*Unaffiliated Entity*" means any entity that is owned or controlled by parties who own less than twenty percent (20%) of the combined voting power of the voting securities of the Company immediately prior to such merger or sale of assets, consolidation or acquisition. Notwithstanding the foregoing, in the event that any outstanding warrants to purchase equity securities of the Company (it being acknowledged and agreed that options to acquire common stock issued to officers, directors, employees and consultants shall not be deemed "warrants") are assumed by the successor entity of a Merger (or parent thereof), this Warrant shall also be similarly assumed and the automatic exercise provision in this **Section 7** shall have no effect. The Company agrees to give the Holder written notice promptly after it has entered into a definitive agreement relating to any proposed Merger and written notice of termination of any definitive agreement relating to any proposed Merger. Notwithstanding anything to the contrary in this Warrant, (i) the Holder may expressly make any voluntary exercise of this Warrant contingent on, and effective immediately prior to, the consummation of such Merger and (ii) any automatic exercise of this Warrant in connection with a Merger shall be conditioned on consummation of such Merger and shall be effective immediately prior thereto.

8. Reserved Shares; Valid Issuance. The Company covenants that it will at all times from and after the date hereof reserve and keep available such number of its authorized shares of Preferred Stock and Common Stock free from all preemptive or similar rights therein, as will be sufficient to permit, respectively, the exercise of this Warrant in full and the conversion into shares of Common Stock of all shares of Preferred Stock receivable upon such exercise. The Company further covenants that such shares as may be issued pursuant to such exercise and/or conversion will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. Stock Splits and Dividends. If after the date hereof the Company shall subdivide the Preferred Stock, by split-up or otherwise, or combine the Preferred Stock, or issue additional shares of Preferred Stock in payment of a stock dividend on the Preferred Stock, the number of shares of Preferred Stock issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. Adjustments for Diluting Issuances. The antidilution rights applicable to the Series E-1 Preferred Stock of the Company are set forth in the Third Amended and Restated Certificate of Incorporation, as amended from time to time (the "*Certificate*"), a true and complete copy of which in its current form is attached hereto as Exhibit A. Such rights shall not be restated, amended or modified in any manner which affects the Holder differently than the holders of outstanding Series E-1 Preferred Stock without such Holder's prior written consent. The Company shall provide the Holder hereof with any restatement, amendment or modification to the Certificate promptly after the same has been made.

11. Mergers and Reclassifications. **(a)** Except as set forth in **Section 7**, If after the date hereof the Company shall enter into any Reorganization (as hereinafter defined), then, as a condition of such Reorganization, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such Reorganization by a holder of the number of shares of Preferred Stock which might have been purchased by the Holder immediately prior to such Reorganization, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof (including without limitation, provisions for the adjustment of the Purchase Price and the number of shares issuable hereunder and the provisions relating to the net issue election) shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof. For the purposes of this **Section 11**, the term "*Reorganization*" shall include without limitation any reclassification, capital reorganization or change of the Preferred Stock (other than as a result of a subdivision, combination or stock dividend provided for in **Section 9** hereof), or any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a merger in which the Company is the surviving corporation and which does not result in any reclassification or change of the outstanding Preferred Stock), or any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company.

(b) Notwithstanding any other provision of this Warrant, in the event of an automatic conversion of the Company's outstanding Series E-1 Preferred Stock into Common Stock in accordance with the Company's Certificate, as in effect from time to time, this Warrant shall thereafter represent the right to acquire for the aggregate Purchase Price (as then in effect) the number of shares of Common Stock into which the number of shares of Preferred Stock issuable upon exercise of this Warrant would have then been convertible.

12. Certificate of Adjustment. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate of the Company's chief financial officer (or other appropriate officer) setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

13. Notices of Record Date, Etc. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase, sell or otherwise acquire or dispose of any shares of stock of any class or any other securities or property, or to receive any other right;

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets; or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then in each such event the Company will provide or cause to be provided to the Holder a written notice thereof. Such notice shall be provided at least twenty (20) business days prior to the date specified in such notice on which any such action is to be taken.

14. Market Stand-off. The Holder hereby agrees that such Holder shall not sell or otherwise transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, of any common stock (or other securities) of the Company held by the Holder (other than those included in the registration) during the one hundred eighty (180) day period following the effective date of the registration statement for a Public Offering filed under the 1933 Act (or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The obligations described in this section shall not apply to a registration relating solely to employee benefit plans on Form S-l or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions and may stamp each certificate with a legend with respect to the shares of common stock (or other securities) subject to the foregoing restriction until the end of such one hundred eighty (180) day (or other) period. The Holder agrees to execute a market stand-off agreement with the underwriters in the offering in customary form consistent with the provisions of this section.

15. Representations, Warranties and Covenants. This Warrant is issued and delivered by the Company and accepted by each Holder on the basis of the following representations, warranties and covenants made by the Company:

(a) The Company has all necessary corporate power and authority to issue, execute and deliver this Warrant and to perform its obligations hereunder. This Warrant has been duly authorized issued, executed and delivered by the Company and is the valid and binding obligation of the Company, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy or similar laws relating to the enforcement of creditors' rights generally.

(b) The shares of Preferred Stock issuable upon the exercise of this Warrant have been duly authorized and reserved for issuance by the Company and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable.

(c) The issuance, execution and delivery of this Warrant do not, and the issuance of the shares of Preferred Stock upon the exercise of this Warrant in accordance with the terms hereof will not, (i) violate or contravene the Company's Certificate or by-laws, or any law, statute, regulation, rule, judgment or order applicable to the Company, (ii) violate, contravene or result in a breach or default under any contract, agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound or (iii) require the consent or approval of or the filing of any notice or registration with any person or entity (other than such notices or filings as may be required under applicable securities laws).

(d) As long as this Warrant is, or any shares of Preferred Stock issued upon exercise of this Warrant or any shares of Common Stock issued upon conversion of such shares of Preferred Stock are, issued and outstanding, the Company will provide to the Holder the financial and other information described in that certain Loan and Security Agreement No. 4561 between the Company and Lighthouse Capital Partners V, L.P. dated as of March 29, 2005, as amended.

(e) As of the date hereof, the authorized capital stock of the Company consists of (i) 28,847,292 shares of Common Stock, of which 3,240,108 shares are issued and outstanding and a sufficient number of which are reserved for issuance upon conversion of the Prior Preferred Stock into Common Stock in the event that this Warrant is exercised with respect to Prior Preferred Stock, (ii) 779,220 shares of Series A Preferred Stock, of which 657,132 are issued and outstanding shares, (iii) 1,845,907 shares of Series B Preferred Stock, of which 1,835,354 are issued and outstanding shares, (iv) 4,815,606 shares of Series C Preferred Stock, of which 4,619,039 are issued and outstanding shares, (v) 3,989,217 shares of Series D Preferred Stock, of which 3,771,976 are issued and outstanding shares, (vii) 106,122 shares of Series D-1 Preferred Stock, none of which are issued and outstanding shares, (vii) 7,802,775 shares of Series E Preferred Stock, of which 6,829,104 are issued and outstanding shares, and (ix) 257,108 shares of Series E-1 Preferred Stock, none of which are issued and outstanding shares. The Company has delivered a capitalization table to Holder summarizing the capitalization of the Company, a copy of which is attached hereto as Exhibit B. At the request of Holder, not more than once per calendar quarter, the Company will

provide Holder with a current capitalization table indicating changes, if any, to the number of outstanding shares of common stock and preferred stock.

16. Registration Rights. The Company grants, upon effectiveness of the Rights Agreement referenced herein, to the Holder all the rights of a "Holder" and a "Warrantholder" under the Company's Ninth Amended and Restated Investors Rights Agreement dated as of November 16, 2009, as amended from time to time (the "*Rights Agreement*"), including, without limitation, the registration rights contained therein, and agrees to solicit approval to amend the Rights Agreement so that (i) the shares of Common Stock issuable upon conversion of the shares of Preferred Stock issuable upon exercise of this Warrant shall be "*Registrable Securities*," and (ii) the Holder shall be a "Holder" and a "Warrantholder" for all purposes of such Rights Agreement.

17. Amendment. The terms of this Warrant may be amended, modified or waived only with the written consent of the Holder and the Company.

18. Representations and Covenants of the Holder. This Warrant has been entered into by the Company in reliance upon the following representations and covenants of the Holder, which by its execution hereof the Holder hereby confirms:

(a) Investment Purpose. The right to acquire Preferred Stock or the Preferred Stock issuable upon exercise of the Holder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Holder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Accredited Investor. Holder is an "accredited investor" within the meaning of Rule 501 of Regulation D, promulgated under the 1933 Act as presently in effect.

(c) Private Issue. The Holder understands (i) that neither the issuance of this Warrant nor the issuance of any shares of the Company's capital stock issuable upon exercise of the Holder's rights contained herein has been registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuances contemplated by this Warrant will be exempt from the registration and qualifications requirements thereof, and (ii) that the Company's reliance on such exemption is predicated on the representations of the Holderset forth in this **Section 18**.

(d) Financial Risk. The Holder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment and has the ability to bear the economic risks of its investment.

19. Notices, Transfers, Etc.

(a) Any notice or written communication required or permitted to be given to the Holder may be given by certified mail or delivered to the Holder at the address most recently provided by the Holder to the Company.

(b) Subject to compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment notice annexed hereto duly executed, for transfer of this Warrant as an entirety by the Holder, the Company shall issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer with respect to a portion of the shares of Preferred Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof, and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

(c) In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon

surrender and cancellation of any mutilated Warrant, or (ii) in lieu of any Warrant lost, stolen or destroyed, upon receipt of an affidavit of the Holder or other evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant

20. No Impairment. The Company will not, by amendment of its Certificate or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance of performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder. In no event shall any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other transaction be deemed an "impairment" for purposes of this Section 20 if the shares of the Company's capital stock issuable upon exercise of this Warrant are affected thereby in the same manner as outstanding shares of such capital stock.

21. Governing Law. The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the State of California without giving effect to its principles regarding conflicts of laws.

22. Successors and Assigns. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

23. Business Days. If the last or appointed day for the taking of any action required or the expiration of any rights granted herein shall be a Saturday or Sunday or a legal holiday in California, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

24. Value. The Company and the Holder agree that the value of this Warrant on the date of grant is $100.

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington

Name: Gajus V. Worthington

Title: CEO

Subscription

To: _____

Date: _____

The undersigned hereby subscribes for _____ shares of Preferred Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

Net Issue Election Notice

To: _____ Date: _____

The undersigned hereby elects under **Section 4** to surrender the right to purchase shares of Preferred Stock pursuant to this Warrant. The certificate(s) for such shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

Assignment

For value received _____ hereby sells, assigns and transfers unto

_____

_____

[Please print or typewrite name and address of Assignee]

_____

the within Warrant, and does hereby irrevocably constitute and appoint _____ its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

Dated: _____

_____

Signature

_____

Name for Registration

In the Presence of:

_____

EXHIBIT A

Third Amended and Restated Certificate of Incorporation

Superseded by Exhibit 3.1 to the registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on December 3, 2010.

EXHIBIT B

Capitalization Table

See attached pages.

Fluidigm Corporation
Fully Diluted Capitalization Table (Issued and Outstanding Shares) - Summary
As of 06/17/2010

	Issued and Outstanding Shares	CSE Shares*	Total Fully Diluted Shares
COMMON STOCK (Authorized: 28,847,292)			
Issued and Outstanding	3,240,108	3,240,108	3,240,108
PREFERRED STOCK (Authorized: 19,595,955)			
SERIES A Preferred Stock (Authorized: 779,220)	657,132	657,132	
SERIES B Preferred Stock (Authorized: 1,845,907)	1,835,354	1,835,354	
SERIES C Preferred Stock (Authorized: 4,815,606)	4,619,039	4,619,039	
SERIES D Preferred Stock (Authorized: 3,989,217)	3,771,976	3,771,976	
SERIES E Preferred Stock (Authorized: 7,802,775)	6,829,104	6,829,104	
SERIES D-1 Preferred Stock (Authorized: 106,122)	0	0	
SERIES E-1 Preferred Stock (Authorized: 257,108)	0	0	17,712,605
WARRANTS			
COMMON Stock	0	0	
SERIES C Stock	13,859	13,859	
SERIES D Stock	10,714	10,714	
SERIES E Stock	380,906	380,906	
SERIES D-1 Stock	106,122	106,122	
SERIES E-1 Stock	257,108	257,108	768,709
2009 Stock Plan (Reserved: 3,140,465)			
Shares Issuable Under Plan:			
Options and SPRs Issued and Outstanding	2,228,230	2,228,230	
Options and SPRs Committed for Issuance	0	0	
Shares Remaining for Issuance Under Plan	912,235	912,235	3,140,465
Reserved in Plan	3,140,465	3,140,465	
less: Options Exercised	0	0	
less: SPRs Exercised	0	0	
	3,140,465	3,140,465	
1999 Plan (Reserved: 2,087,763)			
Shares Issuable Under Plan:			
Options Issued and Outstanding	746,715	746,715	
Options Committed for Issuance	0	0	
Shares Remaining for Issuance Under Plan	0	0	746,715
Reserved in Plan	2,087,763	2,087,763	
less: Options Exercised	1,457,474	1,457,474	
add: Repurchases	116,426	116,426	
	746,715	746,715	

NON PLAN SPRS			
Common Stock	0	0	0
CONVERTIBLE PROMISSORY NOTES			
CONVERTIBLE PROMISSORY NOTES	0	0	0

Total shares issued and outstanding, including shares committed for issuance and employee reserves, assuming conversion of all convertible securities and exercise of all outstanding options	***25,608,602***

CSE Shares* Common Stock Equivalent (CSE) shares reflects the Common Stock issuable for the security type (option, stock, warrant, CPN) after the appropriate conversion ratio is applied to each individual outstanding security for the applicable security type, using standard rounding.

Footnotes:

Fully-Diluted Ownership

	Number of Shares	**%**
Common Stock	3,240,108	12.65%
SERIES A Preferred Stock	657,132	2.57%
SERIES B Preferred Stock	1,835,354	7.17%
SERIES C Preferred Stock	4,619,039	18.04%
SERIES D Preferred Stock	3,771,976	14.73%
SERIES E Preferred Stock	6,829,104	26.67%
SERIES D-1 Preferred Stock		0.00%
SERIES E-1 Preferred Stock		0.00%
COMMON Warrants		0.00%
SERIES C Warrants	13,859	0.05%
SERIES D Warrants	10,714	0.04%
SERIES E Warrants	380,906	1.49%
SERIES D-1 Warrants	106,122	0.41%
SERIES E-1 Warrants	257,108	1.00%
Options and SPRs issued and outstanding under plan - 2009 Stock Plan	2,228,230	8.70%
Committed for Issuance - 2009 Stock Plan		0.00%
Unissued Reserve - 2009 Stock Plan	912,235	3.56%
Options and SPRs issued and outstanding under plan - 1999 Plan	746,715	2.92%
Committed for Issuance - 1999 Plan		0.00%
Unissued Reserve - 1999 Plan		0.00%
Non Plan Common SPR		0.00%
Total	***25,608,602***	***100%***

Exhibit 4.6C

NEITHER THIS WARRANT NOR THE SHARES OF CAPITAL STOCK ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "*1933 ACT*"), OR ANY APPLICABLE STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED UNLESS SUCH SALE OR TRANSFER IS IN ACCORDANCE WITH THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS OR THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO THE COMPANY, TO THE EFFECT THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS.

AMENDED AND RESTATED PREFERRED STOCK PURCHASE WARRANT

Warrant No. WPE-1

Number of Shares: 71,428
Series E-1 Preferred Stock

FLUIDIGM CORPORATION

Effective as of June 14, 2010

Void after March 25, 2016

1. Issuance. This Amended and Restated Preferred Stock Purchase Warrant (the "*Warrant*") is issued to **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** by **FLUIDIGM CORPORATION**, a Delaware corporation (hereinafter with its successors called the "*Company*") and amends and restates in its entirety that certain Warrant dated as of March 25, 2009, by and between Holder and Company.

2. Purchase Price; Number of Shares. The registered holder of this Warrant (the "*Holder*"), commencing on the date hereof, is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company, at a price per share equal to the Purchase Price, 71,428 shares of the Company's Preferred Stock.

In addition to other terms which may be defined herein, the following terms, as used in this Warrant, shall have the following meanings:

(i) "*Next Round Financing*" means a sale of shares of Next Round Stock for cash, but does not include the issuance of any other instrument or other security convertible into or exchangeable for preferred stock, or the issuance of any option, warrant or right to acquire any preferred stock or any security convertible or exchangeable for preferred stock.

(ii) "*Next Round Stock*" means the class or series of the Company's preferred equity securities issued in connection with the Next Round Financing.

(iii) "*Purchase Price*" means the lesser of (i) the lowest price per share paid by an investor for a share of Next Round Stock, or (ii) $7.00.

(iv) "*Preferred Stock*" means the Company's Series E-1 Preferred Stock.

Any capitalized term not defined herein shall have the meaning as set forth in the Loan Agreement.

Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided. The person or persons in whose name or names any certificate representing shares of Preferred Stock is issued hereunder shall be deemed to have become the holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

3. Payment of Purchase Price. The Purchase Price may be paid (i) in cash or by check, (ii) by the surrender by the Holder to the Company of any promissory notes or other obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus accrued interest to the date of surrender, or (iii) by any combination of the foregoing.

4. Net Issue Election. The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares of Preferred Stock equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company, with the net issue election notice annexed hereto duly executed, at the principal office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Preferred Stock as is computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

where: X = the number of shares of Preferred Stock to be issued to the Holder pursuant to this **Section 4**.

Y = the number of shares of Preferred Stock covered by this Warrant in respect of which the net issue election is made pursuant to this **Section 4**.

A = the Fair Market Value (defined below) of one share of Preferred Stock, as determined at the time the net issue election is made pursuant to this **Section 4**.

B = the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this **Section 4**.

"*Fair Market Value*" of a share of Preferred Stock (or fully paid and nonassessable shares of the Company's common stock, $0.0035 par value (the "*Common Stock*") if the Preferred Stock has been automatically converted into Common Stock) as of the date that the net issue election is made (the "*Determination Date*") shall mean:

(i) If the net issue election is made in connection with and contingent upon the closing of the sale of the Company's Common Stock to the public in a public offering pursuant to a Registration Statement under the 1933 Act (a "*Public Offering*"), and if the Company's Registration Statement relating to such Public Offering ("*Registration Statement*") has been declared effective by the Securities and Exchange Commission, then the initial "Price to Public" specified in the final prospectus with respect to such offering multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible.

(ii) If the net issue election is not made in connection with and contingent upon a Public Offering, then as follows:

(a) If traded on a securities exchange or the Nasdaq National Market, the fair market value of the Common Stock shall be deemed to be the average of the closing or last reported sale prices of the Common Stock on such exchange or market over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible;

(b) If otherwise traded in an over-the-counter market, the fair market value of the Common Stock shall be deemed to be the average of the closing ask prices of the Common Stock over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible; and

(c) If there is no public market for the Common Stock, then fair market value shall be determined in good faith by the Company's Board of Directors.

5. Partial Exercise. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. Fractional Shares. In no event shall any fractional share of Preferred Stock be issued upon any exercise of this Warrant. If, upon exercise of this Warrant in its entirety, the Holder would, except as provided in this **Section 6**, be entitled to receive a fractional share of Preferred Stock, then the Company shall issue the next higher number of full shares of Preferred Stock, issuing a full share with respect to such fractional share.

7. Expiration Date; Automatic Exercise. This Warrant shall expire at the close of business on March 25, 2016, and shall be void thereafter (the "*Expiration Date*"). Notwithstanding the term of this Warrant fixed pursuant to this **Section 7,** and provided Holder has received advance written notice of at least twenty (20) days and has not earlier exercised this Warrant, and provided this Warrant has not been assumed by the successor entity (or parent thereof), upon the consummation of a Merger (as defined below), this Warrant shall automatically be exercised pursuant to **Section 4** hereof, without any action by Holder. "*Merger*" means: (i) a sale of all or substantially all of the Company's assets to an Unaffiliated Entity (as defined below), or (ii) the merger, consolidation or acquisition of the Company with, into or by an Unaffiliated Entity (other than a merger or consolidation for the principle purpose of changing the domicile of the Company or a bona fide round of preferred stock equity financing), that results in the Company's shareholders immediately prior to such merger, consolidation, or acquisition holding, immediately thereafter, less than a majority of the outstanding voting securities of the successor corporation or its parent. "*Unaffiliated Entity*" means any entity that is owned or controlled by parties who own less than twenty percent (20%) of the combined voting power of the voting securities of the Company immediately prior to such merger or sale of assets, consolidation or acquisition. Notwithstanding the foregoing, in the event that any outstanding warrants to purchase equity securities of the Company (it being acknowledged and agreed that options to acquire common stock issued to officers, directors, employees and consultants shall not be deemed "warrants") are assumed by the successor entity of a Merger (or parent thereof), this Warrant shall also be similarly assumed and the automatic exercise provision in this **Section 7** shall have no effect. The Company agrees to give the Holder written notice promptly after it has entered into a definitive agreement relating to any proposed Merger and written notice of termination of any definitive agreement relating to any proposed Merger. Notwithstanding anything to the contrary in this Warrant, (i) the Holder may expressly make any voluntary exercise of this Warrant contingent on, and effective immediately prior to, the consummation of such Merger and (ii) any automatic exercise of this Warrant in connection with a Merger shall be conditioned on consummation of such Merger and shall be effective immediately prior thereto.

8. Reserved Shares; Valid Issuance. The Company covenants that it will at all times from and after the date hereof reserve and keep available such number of its authorized shares of Preferred Stock and Common Stock free from all preemptive or similar rights therein, as will be sufficient to permit, respectively, the exercise of this Warrant in full and the conversion into shares of Common Stock of all shares of Preferred Stock receivable upon such exercise. The Company further covenants that such shares as may be issued pursuant to such exercise and/or conversion will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. Stock Splits and Dividends. If after the date hereof the Company shall subdivide the Preferred Stock, by split-up or otherwise, or combine the Preferred Stock, or issue additional shares of Preferred Stock in payment of a stock dividend on the Preferred Stock, the number of shares of Preferred Stock issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or

proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. Adjustments for Diluting Issuances. The antidilution rights applicable to the Series E-1 Preferred Stock of the Company are set forth in the Third Amended and Restated Certificate of Incorporation, as amended from time to time (the "*Certificate*"), a true and complete copy of which in its current form is attached hereto as Exhibit A. Such rights shall not be restated, amended or modified in any manner which affects the Holder differently than the holders of outstanding Series E-1 Preferred Stock without such Holder's prior written consent. The Company shall provide the Holder hereof with any restatement, amendment or modification to the Certificate promptly after the same has been made.

11. Mergers and Reclassifications. **(a)** Except as set forth in **Section 7**, If after the date hereof the Company shall enter into any Reorganization (as hereinafter defined), then, as a condition of such Reorganization, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such Reorganization by a holder of the number of shares of Preferred Stock which might have been purchased by the Holder immediately prior to such Reorganization, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof (including without limitation, provisions for the adjustment of the Purchase Price and the number of shares issuable hereunder and the provisions relating to the net issue election) shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof. For the purposes of this **Section 11**, the term "*Reorganization*" shall include without limitation any reclassification, capital reorganization or change of the Preferred Stock (other than as a result of a subdivision, combination or stock dividend provided for in **Section 9** hereof), or any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a merger in which the Company is the surviving corporation and which does not result in any reclassification or change of the outstanding Preferred Stock), or any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company.

(b) Notwithstanding any other provision of this Warrant, in the event of an automatic conversion of the Company's outstanding Series E-1 Preferred Stock into Common Stock in accordance with the Company's Certificate, as in effect from time to time, this Warrant shall thereafter represent the right to acquire for the aggregate Purchase Price (as then in effect) the number of shares of Common Stock into which the number of shares of Preferred Stock issuable upon exercise of this Warrant would have then been convertible.

12. Certificate of Adjustment. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate of the Company's chief financial officer (or other appropriate officer) setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

13. Notices of Record Date, Etc. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase, sell or otherwise acquire or dispose of any shares of stock of any class or any other securities or property, or to receive any other right;

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets; or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then in each such event the Company will provide or cause to be provided to the Holder a written notice thereof. Such notice shall be provided at least twenty (20) business days prior to the date specified in such notice on which any such action is to be taken.

14. Market Stand-off. The Holder hereby agrees that such Holder shall not sell or otherwise transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, of any common stock (or other securities) of the Company held by the Holder (other than those included in the registration) during the one hundred eighty (180) day period following the effective date of the registration statement for a Public Offering filed under the 1933 Act (or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The obligations described in this section shall not apply to a registration relating solely to employee benefit plans on Form S-l or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions and may stamp each certificate with a legend with respect to the shares of common stock (or other securities) subject to the foregoing restriction until the end of such one hundred eighty (180) day (or other) period. The Holder agrees to execute a market stand-off agreement with the underwriters in the offering in customary form consistent with the provisions of this section.

15. Representations, Warranties and Covenants. This Warrant is issued and delivered by the Company and accepted by each Holder on the basis of the following representations, warranties and covenants made by the Company:

(a) The Company has all necessary corporate power and authority to issue, execute and deliver this Warrant and to perform its obligations hereunder. This Warrant has been duly authorized issued, executed and delivered by the Company and is the valid and binding obligation of the Company, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy or similar laws relating to the enforcement of creditors' rights generally.

(b) The shares of Preferred Stock issuable upon the exercise of this Warrant have been duly authorized and reserved for issuance by the Company and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable.

(c) The issuance, execution and delivery of this Warrant do not, and the issuance of the shares of Preferred Stock upon the exercise of this Warrant in accordance with the terms hereof will not, (i) violate or contravene the Company's Certificate or by-laws, or any law, statute, regulation, rule, judgment or order applicable to the Company, (ii) violate, contravene or result in a breach or default under any contract, agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound or (iii) require the consent or approval of or the filing of any notice or registration with any person or entity (other than such notices or filings as may be required under applicable securities laws).

(d) As long as this Warrant is, or any shares of Preferred Stock issued upon exercise of this Warrant or any shares of Common Stock issued upon conversion of such shares of Preferred Stock are, issued and outstanding, the Company will provide to the Holder the financial and other information described in that certain Loan and Security Agreement No. 4561 between the Company and Lighthouse Capital Partners V, L.P. dated as of March 29, 2005, as amended.

(e) As of the date hereof, the authorized capital stock of the Company consists of (i) 28,847,292 shares of Common Stock, of which 3,240,108 shares are issued and outstanding and a sufficient number of which are reserved for issuance upon conversion of the Prior Preferred Stock into Common Stock in the event that this Warrant is exercised with respect to Prior Preferred Stock, (ii) 779,220 shares of Series A Preferred Stock, of which 657,132 are issued and outstanding shares, (iii) 1,845,907 shares of Series B Preferred Stock, of which 1,835,354 are issued and outstanding shares, (iv) 4,815,606 shares of Series C Preferred Stock, of which 4,619,039 are issued and outstanding shares, (v) 3,989,217 shares of Series D Preferred Stock, of which 3,771,976 are issued and outstanding shares, (vii) 106,122 shares of Series D-1 Preferred Stock, none of which are issued and outstanding

shares, (vii) 7,802,775 shares of Series E Preferred Stock, of which 6,829,104 are issued and outstanding shares, and (ix) 257,108 shares of Series E-1 Preferred Stock, none of which are issued and outstanding shares. The Company has delivered a capitalization table to Holder summarizing the capitalization of the Company, a copy of which is attached hereto as Exhibit B. At the request of Holder, not more than once per calendar quarter, the Company will provide Holder with a current capitalization table indicating changes, if any, to the number of outstanding shares of common stock and preferred stock.

16. Registration Rights. The Company grants, upon effectiveness of the Rights Agreement referenced herein, to the Holder all the rights of a "Holder" and a "Warrantholder" under the Company's Ninth Amended and Restated Investors Rights Agreement dated as of November 16, 2009, as amended from time to time (the "*Rights Agreement*"), including, without limitation, the registration rights contained therein, and agrees to solicit approval to amend the Rights Agreement so that (i) the shares of Common Stock issuable upon conversion of the shares of Preferred Stock issuable upon exercise of this Warrant shall be "*Registrable Securities*," and (ii) the Holder shall be a "Holder" and a "Warrantholder" for all purposes of such Rights Agreement.

17. Amendment. The terms of this Warrant may be amended, modified or waived only with the written consent of the Holder and the Company.

18. Representations and Covenants of the Holder. This Warrant has been entered into by the Company in reliance upon the following representations and covenants of the Holder, which by its execution hereof the Holder hereby confirms:

(a) Investment Purpose. The right to acquire Preferred Stock or the Preferred Stock issuable upon exercise of the Holder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Holder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Accredited Investor. Holder is an "accredited investor" within the meaning of Rule 501 of Regulation D, promulgated under the 1933 Act as presently in effect.

(c) Private Issue. The Holder understands (i) that neither the issuance of this Warrant nor the issuance of any shares of the Company's capital stock issuable upon exercise of the Holder's rights contained herein has been registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuances contemplated by this Warrant will be exempt from the registration and qualifications requirements thereof, and (ii) that the Company's reliance on such exemption is predicated on the representations of the Holderset forth in this **Section 18**.

(d) Financial Risk. The Holder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment and has the ability to bear the economic risks of its investment.

19. Notices, Transfers, Etc.

(a) Any notice or written communication required or permitted to be given to the Holder may be given by certified mail or delivered to the Holder at the address most recently provided by the Holder to the Company.

(b) Subject to compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment notice annexed hereto duly executed, for transfer of this Warrant as an entirety by the Holder, the Company shall issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer with respect to a portion of the shares of Preferred Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof,

and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

(c) In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon surrender and cancellation of any mutilated Warrant, or (ii) in lieu of any Warrant lost, stolen or destroyed, upon receipt of an affidavit of the Holder or other evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant

20. No Impairment. The Company will not, by amendment of its Certificate or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance of performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder. In no event shall any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other transaction be deemed an "impairment" for purposes of this Section 20 if the shares of the Company's capital stock issuable upon exercise of this Warrant are affected thereby in the same manner as outstanding shares of such capital stock.

21. Governing Law. The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the State of California without giving effect to its principles regarding conflicts of laws.

22. Successors and Assigns. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

23. Business Days. If the last or appointed day for the taking of any action required or the expiration of any rights granted herein shall be a Saturday or Sunday or a legal holiday in California, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

24. Value. The Company and the Holder agree that the value of this Warrant on the date of grant is $100.

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington

Name: Gajus V. Worthington

Title: CEO

Subscription

To:_____

Date:_____

The undersigned hereby subscribes for _____ shares of Preferred Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

Net Issue Election Notice

To:_____ Date:_____

The undersigned hereby elects under **Section 4** to surrender the right to purchase shares of Preferred Stock pursuant to this Warrant. The certificate(s) for such shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

Assignment

For value received _____ hereby sells, assigns and transfers unto

_____

_____

[Please print or typewrite name and address of Assignee]

_____

the within Warrant, and does hereby irrevocably constitute and appoint _____ its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

Dated:_____

_____

_____

Signature

_____

Name for Registration

In the Presence of:

_____

EXHIBIT A

Third Amended and Restated Certificate of Incorporation

Superseded by Exhibit 3.1 to the registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on December 3, 2010.

EXHIBIT B

Capitalization Table

See attached pages.

Fluidigm Corporation
Fully Diluted Capitalization Table (Issued and Outstanding Shares) - Summary
As of 06/17/2010

	Issued and Outstanding Shares	CSE Shares*	Total Fully Diluted Shares
COMMON STOCK (Authorized: 28,847,292)			
Issued and Outstanding	3,240,108	3,240,108	3,240,108
PREFERRED STOCK (Authorized: 19,595,955)			
SERIES A Preferred Stock (Authorized: 779,220)	657,132	657,132	
SERIES B Preferred Stock (Authorized: 1,845,907)	1,835,354	1,835,354	
SERIES C Preferred Stock (Authorized: 4,815,606)	4,619,039	4,619,039	
SERIES D Preferred Stock (Authorized: 3,989,217)	3,771,976	3,771,976	
SERIES E Preferred Stock (Authorized: 7,802,775)	6,829,104	6,829,104	
SERIES D-1 Preferred Stock (Authorized: 106,122)	0	0	
SERIES E-1 Preferred Stock (Authorized: 257,108)	0	0	17,712,605
WARRANTS			
COMMON Stock	0	0	
SERIES C Stock	13,859	13,859	
SERIES D Stock	10,714	10,714	
SERIES E Stock	380,906	380,906	
SERIES D-1 Stock	106,122	106,122	
SERIES E-1 Stock	257,108	257,108	768,709
2009 Stock Plan (Reserved: 3,140,465)			
Shares Issuable Under Plan:			
Options and SPRs Issued and Outstanding	2,228,230	2,228,230	
Options and SPRs Committed for Issuance	0	0	
Shares Remaining for Issuance Under Plan	912,235	912,235	3,140,465
Reserved in Plan	3,140,465	3,140,465	
less: Options Exercised	0	0	
less: SPRs Exercised	0	0	
	3,140,465	3,140,465	
1999 Plan (Reserved: 2,087,763)			
Shares Issuable Under Plan:			
Options Issued and Outstanding	746,715	746,715	
Options Committed for Issuance	0	0	
Shares Remaining for Issuance Under Plan	0	0	746,715
Reserved in Plan	2,087,763	2,087,763	
less: Options Exercised	1,457,474	1,457,474	
add: Repurchases	116,426	116,426	
	746,715	746,715	

NON PLAN SPRS			
Common Stock	0	0	0
CONVERTIBLE PROMISSORY NOTES			
CONVERTIBLE PROMISSORY NOTES	0	0	0
Total shares issued and outstanding, including shares committed for issuance and employee reserves, assuming conversion of all convertible securities and exercise of all outstanding options			***25,608,602***

CSE Shares* Common Stock Equivalent (CSE) shares reflects the Common Stock issuable for the security type (option, stock, warrant, CPN) after the appropriate conversion ratio is applied to each individual outstanding security for the applicable security type, using standard rounding.

Footnotes:

Fully-Diluted Ownership

	Number of Shares	%
Common Stock	3,240,108	12.65%
SERIES A Preferred Stock	657,132	2.57%
SERIES B Preferred Stock	1,835,354	7.17%
SERIES C Preferred Stock	4,619,039	18.04%
SERIES D Preferred Stock	3,771,976	14.73%
SERIES E Preferred Stock	6,829,104	26.67%
SERIES D-1 Preferred Stock		0.00%
SERIES E-1 Preferred Stock		0.00%
COMMON Warrants		0.00%
SERIES C Warrants	13,859	0.05%
SERIES D Warrants	10,714	0.04%
SERIES E Warrants	380,906	1.49%
SERIES D-1 Warrants	106,122	0.41%
SERIES E-1 Warrants	257,108	1.00%
Options and SPRs issued and outstanding under plan - 2009 Stock Plan	2,228,230	8.70%
Committed for Issuance - 2009 Stock Plan		0.00%
Unissued Reserve - 2009 Stock Plan	912,235	3.56%
Options and SPRs issued and outstanding under plan - 1999 Plan	746,715	2.92%
Committed for Issuance - 1999 Plan		0.00%
Unissued Reserve - 1999 Plan		0.00%
Non Plan Common SPR		0.00%
Total	***25,608,602***	***100%***

Exhibit 4.6D

NEITHER THIS WARRANT NOR THE SHARES OF CAPITAL STOCK ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "*1933 ACT*"), OR ANY APPLICABLE STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED UNLESS SUCH SALE OR TRANSFER IS IN ACCORDANCE WITH THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS OR THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO THE COMPANY, TO THE EFFECT THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS.

PREFERRED STOCK PURCHASE WARRANT

Warrant No._____ Number of Shares: $699,760/Purchase Price
Preferred Stock
subject to change as set forth below

FLUIDIGM CORPORATION

Effective as of June 14, 2010

Void after June 14, 2017

1. Issuance. This Preferred Stock Purchase Warrant (the "*Warrant*") is issued to **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** by **FLUIDIGM CORPORATION**, a Delaware corporation (hereinafter with its successors called the "*Company*").

2. Purchase Price; Number of Shares. The registered holder of this Warrant (the "*Holder*"), commencing on the date hereof, is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company, at a price per share equal to the Purchase Price, that number of fully paid and nonassessable shares of the Company's Preferred Stock equal to $699,760, *divided by* the Purchase Price.

Until such time as the Next Round Financing (as defined below) closes, the Holder shall have the right, in substitution of the rights granted to Holder above, upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company, at a price per share equal to the Purchase Price, that number of shares the Prior Preferred Stock equal to $699,760, *divided by* the Purchase Price.

In addition to other terms which may be defined herein, the following terms, as used in this Warrant, shall have the following meanings:

(i) "*Next Round Financing*" means a sale of shares of Next Round Stock for cash, but does not include the issuance of any other instrument or other security convertible into or exchangeable for preferred stock, or the issuance of any option, warrant or right to acquire any preferred stock or any security convertible or exchangeable for preferred stock.

(ii) "*Next Round Stock*" means the class or series of the Company's preferred equity securities issued in connection with the Next Round Financing.

(iii) "*Preferred Stock*" means (a) prior to the Next Round Financing, the Prior Preferred Stock, otherwise (b) if the lowest price per share paid by an investor for a share of Next Round Stock in connection with the Next Round Financing is less than or equal to $7.00, the Next Round Stock, or (c) if the lowest price per share paid by an investor for a share of Next Round Stock in connection with the Next Round Financing is

greater than $7.00, a new series of the preferred equity securities to be created by the Company, the rights, privileges and preferences of which will replicate those of the Next Round Stock, except that the liquidation preference for such shares will be $7.00 per share, subject to adjustment from time to time in accordance with the Company's certificate of incorporation then in effect.

(iv) "*Prior Preferred Stock*" means the Company's Series E-1 Preferred Stock.

(v) "*Purchase Price*" means the lesser of (i) the lowest price per share paid by an investor for a share of Next Round Stock in connection with the Next Round Financing or (ii) $7.00.

Any capitalized term not defined herein shall have the meaning as set forth in the Loan Agreement.

Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided. The person or persons in whose name or names any certificate representing shares of Preferred Stock is issued hereunder shall be deemed to have become the holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

3. Payment of Purchase Price. The Purchase Price may be paid (i) in cash or by check, (ii) by the surrender by the Holder to the Company of any promissory notes or other obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus accrued interest to the date of surrender, or (iii) by any combination of the foregoing.

4. Net Issue Election. The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares of Preferred Stock equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company, with the net issue election notice annexed hereto duly executed, at the principal office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Preferred Stock as is computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

where: X = the number of shares of Preferred Stock to be issued to the Holder pursuant to this **Section 4**.

Y = the number of shares of Preferred Stock covered by this Warrant in respect of which the net issue election is made pursuant to this **Section 4**.

A = the Fair Market Value (defined below) of one share of Preferred Stock, as determined at the time the net issue election is made pursuant to this **Section 4**.

B = the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this **Section 4**.

"*Fair Market Value*" of a share of Preferred Stock (or fully paid and nonassessable shares of the Company's common stock, $0.0035 par value (the "*Common Stock*") if the Preferred Stock has been automatically converted into Common Stock) as of the date that the net issue election is made (the "*Determination Date*") shall mean:

(i) If the net issue election is made in connection with and contingent upon the closing of the sale of the Company's Common Stock to the public in a public offering pursuant to a Registration Statement under the 1933 Act (a "*Public Offering*"), and if the Company's Registration Statement relating to such Public Offering ("*Registration Statement*") has been declared effective by the Securities and Exchange Commission, then the initial

"Price to Public" specified in the final prospectus with respect to such offering multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible.

(ii) If the net issue election is not made in connection with and contingent upon a Public Offering, then as follows:

(a) If traded on a securities exchange or the Nasdaq National Market, the fair market value of the Common Stock shall be deemed to be the average of the closing or last reported sale prices of the Common Stock on such exchange or market over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible;

(b) If otherwise traded in an over-the-counter market, the fair market value of the Common Stock shall be deemed to be the average of the closing ask prices of the Common Stock over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible; and

(c) If there is no public market for the Common Stock, then fair market value shall be determined in good faith by the Company's Board of Directors.

5. Partial Exercise. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. Fractional Shares. In no event shall any fractional share of Preferred Stock be issued upon any exercise of this Warrant. If, upon exercise of this Warrant in its entirety, the Holder would, except as provided in this **Section 6**, be entitled to receive a fractional share of Preferred Stock, then the Company shall issue the next higher number of full shares of Preferred Stock, issuing a full share with respect to such fractional share.

7. Expiration Date; Automatic Exercise. This Warrant shall expire at the close of business on March ____, 2017, and shall be void thereafter (the "*Expiration Date*"). Notwithstanding the term of this Warrant fixed pursuant to this **Section 7,** and provided Holder has received advance written notice of at least twenty (20) days and has not earlier exercised this Warrant, and provided this Warrant has not been assumed by the successor entity (or parent thereof), upon the consummation of a Merger (as defined below), this Warrant shall automatically be exercised pursuant to **Section 4** hereof, without any action by Holder. "*Merger*" means: (i) a sale of all or substantially all of the Company's assets to an Unaffiliated Entity (as defined below), or (ii) the merger, consolidation or acquisition of the Company with, into or by an Unaffiliated Entity (other than a merger or consolidation for the principle purpose of changing the domicile of the Company or a bona fide round of preferred stock equity financing), that results in the Company's shareholders immediately prior to such merger, consolidation, or acquisition holding, immediately thereafter, less than a majority of the outstanding voting securities of the successor corporation or its parent. "*Unaffiliated Entity*" means any entity that is owned or controlled by parties who own less than twenty percent (20%) of the combined voting power of the voting securities of the Company immediately prior to such merger or sale of assets, consolidation or acquisition. Notwithstanding the foregoing, in the event that any outstanding warrants to purchase equity securities of the Company (it being acknowledged and agreed that options to acquire common stock issued to officers, directors, employees and consultants shall not be deemed "warrants") are assumed by the successor entity of a Merger (or parent thereof), this Warrant shall also be similarly assumed and the automatic exercise provision in this **Section 7** shall have no effect. The Company agrees to give the Holder written notice promptly after it has entered into a definitive agreement relating to any proposed Merger and written notice of termination of any definitive agreement relating to any proposed Merger. Notwithstanding anything to the contrary in this Warrant, (i) the Holder may expressly make any voluntary exercise of this Warrant contingent on, and effective immediately prior to, the consummation of such Merger and (ii) any automatic exercise of this Warrant in connection with a Merger shall be conditioned on consummation of such Merger and shall be effective immediately prior thereto.

8. Reserved Shares; Valid Issuance. The Company covenants that it will at all times from and after the date hereof reserve and keep available such number of its authorized shares of Preferred Stock and Common Stock free from all preemptive or similar rights therein, as will be sufficient to permit, respectively, the exercise of this Warrant in full and the conversion into shares of Common Stock of all shares of Preferred Stock receivable upon such exercise. The Company further covenants that such shares as may be issued pursuant to such exercise and/or conversion will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. Stock Splits and Dividends. If after the date hereof the Company shall subdivide the Preferred Stock, by split-up or otherwise, or combine the Preferred Stock, or issue additional shares of Preferred Stock in payment of a stock dividend on the Preferred Stock, the number of shares of Preferred Stock issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. Adjustments for Diluting Issuances. The antidilution rights applicable to the Series E-1 Preferred Stock of the Company are set forth in the Third Amended and Restated Certificate of Incorporation, as amended from time to time (the "*Certificate*"), a true and complete copy of which in its current form is attached hereto as Exhibit A. Such rights shall not be restated, amended or modified in any manner which affects the Holder differently than the holders of outstanding Series E-1 Preferred Stock without such Holder's prior written consent. The Company shall provide the Holder hereof with any restatement, amendment or modification to the Certificate promptly after the same has been made.

11. Mergers and Reclassifications. **(a)** Except as set forth in **Section 7**, If after the date hereof the Company shall enter into any Reorganization (as hereinafter defined), then, as a condition of such Reorganization, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such Reorganization by a holder of the number of shares of Preferred Stock which might have been purchased by the Holder immediately prior to such Reorganization, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof (including without limitation, provisions for the adjustment of the Purchase Price and the number of shares issuable hereunder and the provisions relating to the net issue election) shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof. For the purposes of this **Section 11**, the term "*Reorganization*" shall include without limitation any reclassification, capital reorganization or change of the Preferred Stock (other than as a result of a subdivision, combination or stock dividend provided for in **Section 9** hereof), or any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a merger in which the Company is the surviving corporation and which does not result in any reclassification or change of the outstanding Preferred Stock), or any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company.

(b) Notwithstanding any other provision of this Warrant, in the event of an automatic conversion of the Company's outstanding Series E-1 Preferred Stock into Common Stock in accordance with the Company's Certificate, as in effect from time to time, this Warrant shall thereafter represent the right to acquire for the aggregate Purchase Price (as then in effect) the number of shares of Common Stock into which the number of shares of Preferred Stock issuable upon exercise of this Warrant would have then been convertible.

12. Certificate of Adjustment. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate of the Company's chief financial officer (or other appropriate officer) setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

13. Notices of Record Date, Etc. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase, sell or otherwise acquire or dispose of any shares of stock of any class or any other securities or property, or to receive any other right;

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets; or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then in each such event the Company will provide or cause to be provided to the Holder a written notice thereof. Such notice shall be provided at least twenty (20) business days prior to the date specified in such notice on which any such action is to be taken.

14. Market Stand-off. The Holder hereby agrees that such Holder shall not sell or otherwise transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, of any common stock (or other securities) of the Company held by the Holder (other than those included in the registration) during the one hundred eighty (180) day period following the effective date of the registration statement for a Public Offering filed under the 1933 Act (or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The obligations described in this section shall not apply to a registration relating solely to employee benefit plans on Form S-l or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions and may stamp each certificate with a legend with respect to the shares of common stock (or other securities) subject to the foregoing restriction until the end of such one hundred eighty (180) day (or other) period. The Holder agrees to execute a market stand-off agreement with the underwriters in the offering in customary form consistent with the provisions of this section.

15. Representations, Warranties and Covenants. This Warrant is issued and delivered by the Company and accepted by each Holder on the basis of the following representations, warranties and covenants made by the Company:

(a) The Company has all necessary corporate power and authority to issue, execute and deliver this Warrant and to perform its obligations hereunder. This Warrant has been duly authorized issued, executed and delivered by the Company and is the valid and binding obligation of the Company, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy or similar laws relating to the enforcement of creditors' rights generally.

(b) The shares of Preferred Stock issuable upon the exercise of this Warrant have been duly authorized and reserved for issuance by the Company and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable.

(c) The issuance, execution and delivery of this Warrant do not, and the issuance of the shares of Preferred Stock upon the exercise of this Warrant in accordance with the terms hereof will not, (i) violate or contravene the Company's Certificate or by-laws, or any law, statute, regulation, rule, judgment or order applicable to the Company, (ii) violate, contravene or result in a breach or default under any contract, agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound or (iii) require the consent or approval of or the filing of any notice or registration with any person or entity (other than such notices or filings as may be required under applicable securities laws).

(d) As long as this Warrant is, or any shares of Preferred Stock issued upon exercise of this Warrant or any shares of Common Stock issued upon conversion of such shares of Preferred Stock are, issued and

outstanding, the Company will provide to the Holder the financial and other information described in that certain Loan and Security Agreement No. 4561 between the Company and Lighthouse Capital Partners V, L.P. dated as of March 29, 2005, as amended.

(e) As of the date hereof, the authorized capital stock of the Company consists of (i) 28,847,292 shares of Common Stock, of which 3,240,108 shares are issued and outstanding and a sufficient number of which are reserved for issuance upon conversion of the Prior Preferred Stock into Common Stock in the event that this Warrant is exercised with respect to Prior Preferred Stock, (ii) 779,220 shares of Series A Preferred Stock, of which 657,132 are issued and outstanding shares, (iii) 1,845,907 shares of Series B Preferred Stock, of which 1,835,354 are issued and outstanding shares, (iv) 4,815,606 shares of Series C Preferred Stock, of which 4,619,039 are issued and outstanding shares, (v) 3,989,217 shares of Series D Preferred Stock, of which 3,771,976 are issued and outstanding shares, (vii) 106,122 shares of Series D-1 Preferred Stock, none of which are issued and outstanding shares, (vii) 7,802,775 shares of Series E Preferred Stock, of which 6,829,104 are issued and outstanding shares, and (ix) 257,108 shares of Series E-1 Preferred Stock, none of which are issued and outstanding shares. The Company has delivered a capitalization table to Holder summarizing the capitalization of the Company, a copy of which is attached hereto as Exhibit B. At the request of Holder, not more than once per calendar quarter, the Company will provide Holder with a current capitalization table indicating changes, if any, to the number of outstanding shares of common stock and preferred stock.

16. Registration Rights. The Company grants, upon effectiveness of the Rights Agreement referenced herein, to the Holder all the rights of a "Holder" and a "Warrantholder" under the Company's Ninth Amended and Restated Investors Rights Agreement dated as of November 16, 2009, as amended from time to time (the "*Rights Agreement*"), including, without limitation, the registration rights contained therein, and agrees to solicit approval to amend the Rights Agreement so that (i) the shares of Common Stock issuable upon conversion of the shares of Preferred Stock issuable upon exercise of this Warrant shall be "*Registrable Securities*," and (ii) the Holder shall be a "Holder" and a "Warrantholder" for all purposes of such Rights Agreement.

17. Amendment. The terms of this Warrant may be amended, modified or waived only with the written consent of the Holder and the Company.

18. Representations and Covenants of the Holder. This Warrant has been entered into by the Company in reliance upon the following representations and covenants of the Holder, which by its execution hereof the Holder hereby confirms:

(a) Investment Purpose. The right to acquire Preferred Stock or the Preferred Stock issuable upon exercise of the Holder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Holder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Accredited Investor. Holder is an "accredited investor" within the meaning of Rule 501 of Regulation D, promulgated under the 1933 Act as presently in effect.

(c) Private Issue. The Holder understands (i) that neither the issuance of this Warrant nor the issuance of any shares of the Company's capital stock issuable upon exercise of the Holder's rights contained herein has been registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuances contemplated by this Warrant will be exempt from the registration and qualifications requirements thereof, and (ii) that the Company's reliance on such exemption is predicated on the representations of the Holderset forth in this **Section 18**.

(d) Financial Risk. The Holder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment and has the ability to bear the economic risks of its investment.

19. Notices, Transfers, Etc.

(a) Any notice or written communication required or permitted to be given to the Holder may be given by certified mail or delivered to the Holder at the address most recently provided by the Holder to the Company.

(b) Subject to compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment notice annexed hereto duly executed, for transfer of this Warrant as an entirety by the Holder, the Company shall issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer with respect to a portion of the shares of Preferred Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof, and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

(c) In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon surrender and cancellation of any mutilated Warrant, or (ii) in lieu of any Warrant lost, stolen or destroyed, upon receipt of an affidavit of the Holder or other evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant

20. No Impairment. The Company will not, by amendment of its Certificate or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance of performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder. In no event shall any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other transaction be deemed an "impairment" for purposes of this Section 20 if the shares of the Company's capital stock issuable upon exercise of this Warrant are affected thereby in the same manner as outstanding shares of such capital stock.

21. Governing Law. The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the State of California without giving effect to its principles regarding conflicts of laws.

22. Successors and Assigns. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

23. Business Days. If the last or appointed day for the taking of any action required or the expiration of any rights granted herein shall be a Saturday or Sunday or a legal holiday in California, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

24. Value. The Company and the Holder agree that the value of this Warrant on the date of grant is $100.

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington

Name: Gajus V. Worthington

Title: CEO

Subscription

To: _____

Date: _____

The undersigned hereby subscribes for _____ shares of Preferred Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

Net Issue Election Notice

To:_____ Date:_____

The undersigned hereby elects under **Section 4** to surrender the right to purchase shares of Preferred Stock pursuant to this Warrant. The certificate(s) for such shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

Assignment

For value received _____ hereby sells, assigns and transfers unto

_____

_____

[Please print or typewrite name and address of Assignee]

_____

the within Warrant, and does hereby irrevocably constitute and appoint _____ its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

Dated: _____

_____

Signature

_____

Name for Registration

In the Presence of:

_____

EXHIBIT A

Third Amended and Restated Certificate of Incorporation

Superseded by Exhibit 3.1 to the registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on December 3, 2010.

EXHIBIT B

Capitalization Table

See attached pages.

Fluidigm Corporation
Fully Diluted Capitalization Table (Issued and Outstanding Shares) - Summary
As of 06/17/2010

	Issued and Outstanding Shares	CSE Shares*	Total Fully Diluted Shares
COMMON STOCK (Authorized: 28,847,292)			
Issued and Outstanding	3,240,108	3,240,108	3,240,108
PREFERRED STOCK (Authorized: 19,595,955)			
SERIES A Preferred Stock (Authorized: 779,220)	657,132	657,132	
SERIES B Preferred Stock (Authorized: 1,845,907)	1,835,354	1,835,354	
SERIES C Preferred Stock (Authorized: 4,815,606)	4,619,039	4,619,039	
SERIES D Preferred Stock (Authorized: 3,989,217)	3,771,976	3,771,976	
SERIES E Preferred Stock (Authorized: 7,802,775)	6,829,104	6,829,104	
SERIES D-1 Preferred Stock (Authorized: 106,122)	0	0	
SERIES E-1 Preferred Stock (Authorized: 257,108)	0	0	17,712,605
WARRANTS			
COMMON Stock	0	0	
SERIES C Stock	13,859	13,859	
SERIES D Stock	10,714	10,714	
SERIES E Stock	380,906	380,906	
SERIES D-1 Stock	106,122	106,122	
SERIES E-1 Stock	257,108	257,108	768,709
2009 Stock Plan (Reserved: 3,140,465)			
Shares Issuable Under Plan:			
Options and SPRs Issued and Outstanding	2,228,230	2,228,230	
Options and SPRs Committed for Issuance	0	0	
Shares Remaining for Issuance Under Plan	912,235	912,235	3,140,465
Reserved in Plan	3,140,465	3,140,465	
less: Options Exercised	0	0	
less: SPRs Exercised	0	0	
	3,140,465	3,140,465	
1999 Plan (Reserved: 2,087,763)			
Shares Issuable Under Plan:			
Options Issued and Outstanding	746,715	746,715	
Options Committed for Issuance	0	0	
Shares Remaining for Issuance Under Plan	0	0	746,715
Reserved in Plan	2,087,763	2,087,763	
less: Options Exercised	1,457,474	1,457,474	
add: Repurchases	116,426	116,426	

	746,715	746,715	
NON PLAN SPRS			
Common Stock	0	0	0
CONVERTIBLE PROMISSORY NOTES			
CONVERTIBLE PROMISSORY NOTES	0	0	0
Total shares issued and outstanding, including shares committed for issuance and employee reserves, assuming conversion of all convertible securities and exercise of all outstanding options			***25,608,602***

CSE Shares* Common Stock Equivalent (CSE) shares reflects the Common Stock issuable for the security type (option, stock, warrant, CPN) after the appropriate conversion ratio is applied to each individual outstanding security for the applicable security type, using standard rounding.

Footnotes:

Fully-Diluted Ownership

	Number of Shares	%
Common Stock	3,240,108	12.65%
SERIES A Preferred Stock	657,132	2.57%
SERIES B Preferred Stock	1,835,354	7.17%
SERIES C Preferred Stock	4,619,039	18.04%
SERIES D Preferred Stock	3,771,976	14.73%
SERIES E Preferred Stock	6,829,104	26.67%
SERIES D-1 Preferred Stock		0.00%
SERIES E-1 Preferred Stock		0.00%
COMMON Warrants		0.00%
SERIES C Warrants	13,859	0.05%
SERIES D Warrants	10,714	0.04%
SERIES E Warrants	380,906	1.49%
SERIES D-1 Warrants	106,122	0.41%
SERIES E-1 Warrants	257,108	1.00%
Options and SPRs issued and outstanding under plan - 2009 Stock Plan	2,228,230	8.70%
Committed for Issuance - 2009 Stock Plan		0.00%
Unissued Reserve - 2009 Stock Plan	912,235	3.56%
Options and SPRs issued and outstanding under plan - 1999 Plan	746,715	2.92%
Committed for Issuance - 1999 Plan		0.00%
Unissued Reserve - 1999 Plan		0.00%
Non Plan Common SPR		0.00%
Total	***25,608,602***	***100%***

Exhibit 4.6E

NEGATIVE PLEDGE AGREEMENT

THIS NEGATIVE PLEDGE AGREEMENT is made as of March 29, 2005, by and between **FLUIDIGM CORPORATION** ("*Borrower*") and **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** ("*Lender*").

In consideration of the Loan and Security Agreement between the parties of proximate date herewith (the "*Loan Agreement*"), Borrower agrees as follows:

Except as otherwise permitted in the Loan Agreement, Borrower shall not sell, transfer, assign, mortgage, pledge, lease, grant a security interest in, or encumber any of Borrower's owned intellectual property, including, without limitation, the following:

(a) Any and all copyright rights, copyright applications, copyright registration and like protection in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held (collectively, the "*Copyrights*");

(b) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;

(c) Any and all design rights which may be available to Borrower now or hereafter existing, created, acquired or held;

(d) All patents, patent applications and like protections, including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including, without limitation, the patents and patent applications (collectively, the "*Patents*");

(e) Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks (collectively, the "*Trademarks*");

(f) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for an collect such damages for said use or infringement of the intellectual property rights identified above;

(g) Any and all licenses or other rights to use any of the Copyrights, Patents or Trademarks and all license fees and royalties arising from such use to the extent permitted by such license or rights

(h) Any and all amendments, extensions, renewals and extensions of any of the Copyrights, Patents or Trademarks; and

(i) Any and all proceeds and products of the foregoing, including, without limitation, all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

It shall be an Event of Default under the Loan Agreement if there is a breach of any term of this Negative Pledge Agreement. Borrower agrees to properly execute all documents reasonably required by Lender in order to fulfill the intent and purposes hereof.

FLUIDIGM CORPORATION

By: /s/ Gajus Worthington

Name: Gajus Worthington

Title: President & CEO

LIGHTHOUSE CAPITAL PARTNERS V, L.P.

By: LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,
its general partner

By: /s/ Thomas Conneely

Name: Thomas Conneely

Title: Vice President

March 29, 2005

Lighthouse Capital Partners V, L.P.
500 Drakes Landing Road
Greenbrae, CA 94904

Re: Management Rights

Ladies and Gentlemen:

This letter will confirm our agreement that pursuant to and effective as of the date hereof Fluidigm Corporation (the **"Company")** shall grant Lighthouse Capital Partners V, L.P. (the **"Investor")** the following contractual management rights, in addition to any rights to non-public financial information, inspection rights, and other rights specifically provided to Investor under that certain Loan and Security Agreement of even date herewith (the "Loan Agreement"):

1. If Investor is not represented on Company's Board of Directors, Investor shall be entitled to consult with and advise management of the Company on significant business issues, including management's proposed annual operating plans, and management will meet with Investor regularly during each year at the Company's facilities at mutually agreeable times for such consultation and advice and to review progress in achieving said plans.

2. Investor may examine the books and records of the Company and inspect its facilities and may request information at reasonable times and intervals concerning the general status of the Company's financial condition and operations, provided that access to highly confidential proprietary information and facilities need not be provided.

3. If Investor is not represented on the Company's Board of Directors, the Company shall, concurrently with delivery to the Board of Directors, give a representative of Investor copies of all notices, minutes, consents and other material that the Company provides to its directors, except that the representative may be excluded from access to any material or meeting or portion thereof if the Board of Directors determines in good faith, upon advice of counsel, that such exclusion is reasonably necessary to preserve the attorney-client privilege, to protect highly confidential proprietary information, or for other similar reasons. Upon reasonable notice and at a scheduled meeting of the Board or such other time, if any, as the Board may determine in its sole discretion, such representative may address the Board with respect to Investor's concerns regarding significant business issues facing the Company.

Investor agrees that any confidential information provided to or learned by it in connection with it rights under this letter shall be subject to the confidentiality provisions set forth in that certain Investor's Rights Agreement dated December 18, 2003.

The rights described herein shall terminate and be of no further force or effect upon (a) such time as both (i) the Loan Agreement has been terminated following the repayment by the Company of all amounts owed to Investor under the Loan Agreement and (ii) neither the Investor nor any of its affiliates holds any shares of the Company's capital stock or warrants to purchase shares of the Company's capital stock; (b) the consummation of the sale of the Company's securities pursuant to a registration statement filed by the Company under the Securities Act of 1933, as amended, in connection with the firm commitment underwritten offering of its securities to the general public or (c) the consummation of a merger or consolidation of the Company that is effected (i) for independent business reasons unrelated to extinguishing such rights and (ii) for purposes other the (A) the reincorporation of the Company in a different state or (B) the formation of a holding company that will be owned exclusively by the Company's stockholders and will hold all of the outstanding shares of capital stock of the Company's successor. The confidentiality obligations referenced here will survive any such termination.

Very truly yours,

FLUIDIGM CORPORATION

By: /s/ Gajus Worthington

Name: Gajus Worthington

Title: President & CEO

Agreed and Accepted:

LIGHTHOUSE CAPITAL PARTNERS V, L.P.

By: LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,
its general partner

By: /s/ Thomas Conneely

Name: Thomas Conneely

Title: Vice President

Exhibit 10.2

FLUIDIGM CORPORATION

1999 STOCK OPTION PLAN

(as amended April 24, 2007, January 29, 2008, and April 24, 2008)

1. Purposes of the Plan. The purposes of this Stock Option Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Employees, Directors and Consultants and to promote the success of the Company's business. Options granted under the Plan may be Incentive Stock Options or Nonstatutory Stock Options, as determined by the Administrator at the time of grant.

2. Definitions. As used herein, the following definitions shall apply:

(a) "Administrator" means the Board or any of its Committees as shall be administering the Plan in accordance with Section 4 hereof.

(b) "Applicable Laws" means the requirements relating to the administration of stock option plans under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any other country or jurisdiction where Options are granted under the Plan.

(c) "Board" means the Board of Directors of the Company.

(d) "Code" means the Internal Revenue Code of 1986, as amended.

(e) "Committee" means a committee of Directors appointed by the Board in accordance with Section 4 hereof.

(f) "Common Stock" means the Common Stock of the Company.

(g) "Company" means Fluidigm Corporation, a Delaware corporation.

(h) "Consultant" means any person who is engaged by the Company or any Parent or Subsidiary to render consulting or advisory services to such entity.

(i) "Director" means a member of the Board of Directors of the Company.

(j) "Disability" means total and permanent disability as defined in Section 22(e)(3) of the Code.

(k) "Employee" means any person, including Officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. A Service Provider shall not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, any Subsidiary, or any successor. For purposes of Incentive Stock Options, no such leave may exceed three (3) months,

unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then six (6) months following the first day of such leave any Incentive Stock Option held by the Optionee shall cease to be treated as an Incentive Stock Option and shall be treated for tax purposes as a Nonstatutory Stock Option. Neither service as a Director nor payment of a director's fee by the Company shall be sufficient to constitute "employment" by the Company.

(l) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(m) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq National Market or The Nasdaq SmallCap Market of The Nasdaq Stock Market, its Fair Market Value shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system for the last market trading day prior to the time of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value shall be the mean between the high bid and low asked prices for the Common Stock on the last market trading day prior to the day of determination; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value thereof shall be determined in good faith by the Administrator.

(n) "Incentive Stock Option" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code.

(o) "Nonstatutory Stock Option" means an Option not intended to qualify as an Incentive Stock Option.

(p) "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(q) "Option" means a stock option granted pursuant to the Plan.

(r) "Option Agreement" means a written or electronic agreement between the Company and an Optionee evidencing the terms and conditions of an individual Option grant. The Option Agreement is subject to the terms and conditions of the Plan.

(s) "Option Exchange Program" means a program whereby outstanding Options are exchanged for Options with a lower exercise price.

(t) "Optioned Stock" means the Common Stock subject to an Option.

(u) "Optionee" means the holder of an outstanding Option granted under the Plan.

(v) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

(w) "Plan" means this 1999 Stock Option Plan.

(x) "Service Provider" means an Employee, Director or Consultant.

(y) "Share" means a share of the Common Stock, as adjusted in accordance with Section 11 below.

(z) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code.

3. Stock Subject to the Plan. Subject to the provisions of Section 11 of the Plan, the maximum aggregate number of Shares which may be subject to option and sold under the Plan is 4,228,571 Shares. The Shares may be authorized but unissued, or reacquired Common Stock.

If an Option expires or becomes unexercisable without having been exercised in full, or is surrendered pursuant to an Option Exchange Program, the unpurchased Shares which were subject thereto shall become available for future grant or sale under the Plan (unless the Plan has terminated). However, Shares that have actually been issued under the Plan, upon exercise of an Option, shall not be returned to the Plan and shall not become available for future distribution under the Plan, except that if Shares are repurchased by the Company at their original purchase price, such Shares shall become available for future grant under the Plan.

4. Administration of the Plan.

(a) Administrator. The Plan shall be administered by the Board or a Committee appointed by the Board, which Committee shall be constituted to comply with Applicable Laws.

(b) Powers of the Administrator. Subject to the provisions of the Plan and, in the case of a Committee, the specific duties delegated by the Board to such Committee, and subject to the approval of any relevant authorities, the Administrator shall have the authority in its discretion:

(i) to determine the Fair Market Value;

(ii) to select the Service Providers to whom Options may from time to time be granted hereunder;

(iii) to determine the number of Shares to be covered by each such award granted hereunder;

(iv) to approve forms of agreement for use under the Plan;

(v) to determine the terms and conditions, of any Option granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Options may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Option or the Common Stock relating thereto, based in each case on such factors as the Administrator, in its sole discretion, shall determine;

(vi) to determine whether and under what circumstances an Option may be settled in cash under subsection 9(e) instead of Common Stock;

(vii) to reduce the exercise price of any Option to the then current Fair Market Value if the Fair Market Value of the Common Stock covered by such Option has declined since the date the Option was granted;

(viii) to initiate an Option Exchange Program;

(ix) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of qualifying for preferred tax treatment under foreign tax laws;

(x) to allow Optionees to satisfy withholding tax obligations by electing to have the Company withhold from the Shares to be issued upon exercise of an Option that number of Shares having a Fair Market Value equal to the amount required to be withheld. The Fair Market Value of the Shares to be withheld shall be determined on the date that the amount of tax to be withheld is to be determined. All elections by Optionees to have Shares withheld for this purpose shall be made in such form and under such conditions as the Administrator may deem necessary or advisable; and

(xi) to construe and interpret the terms of the Plan and awards granted pursuant to the Plan.

(c) Effect of Administrator's Decision. All decisions, determinations and interpretations of the Administrator shall be final and binding on all Optionees.

5. Eligibility.

(a) Nonstatutory Stock Options may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

(b) Each Option shall be designated in the Option Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Optionee during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds $100,000, such Options shall be treated as Nonstatutory Stock Options. For purposes of this Section 5(b), Incentive Stock Options

shall be taken into account in the order in which they were granted. The Fair Market Value of the Shares shall be determined as of the time the Option with respect to such Shares is granted.

(c) Neither the Plan nor any Option shall confer upon any Optionee any right with respect to continuing the Optionee's relationship as a Service Provider with the Company, nor shall it interfere in any way with his or her right or the Company's right to terminate such relationship at any time, with or without cause.

6. Term of Plan. The Plan shall become effective upon its adoption by the Board. It shall continue in effect for a term of ten (10) years unless sooner terminated under Section 13 of the Plan.

7. Term of Option. The term of each Option shall be stated in the Option Agreement; provided, however, that the term shall be no more than ten (10) years from the date of grant thereof. In the case of an Incentive Stock Option granted to an Optionee who, at the time the Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Option shall be five (5) years from the date of grant or such shorter term as may be provided in the Option Agreement.

8. Option Exercise Price and Consideration.

(a) The per share exercise price for the Shares to be issued upon exercise of an Option shall be such price as is determined by the Administrator, but shall be subject to the following:

(i) In the case of an Incentive Stock Option

(1) granted to an Employee who, at the time of grant of such Option, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant.

(2) granted to any other Employee, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(ii) In the case of a Nonstatutory Stock Option, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(iii) Notwithstanding the foregoing, Options may be granted with a per Share exercise price other than as required above pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code.

(b) The consideration to be paid for the Shares to be issued upon exercise of an Option, including the method of payment, shall be determined by the Administrator (and, in the case of an Incentive Stock Option, shall be determined at the time of grant). Such consideration may consist of (1) cash, (2) check, (3) promissory note, (4) other Shares, provided such Shares have a Fair

Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which such Option shall be exercised and provided further that accepting such Shares will not result in adverse accounting consequences to the Company, as determined by the Administrator in its sole discretion, (5) consideration received by the Company under a cashless exercise program implemented by the Company in connection with the Plan, or (6) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws, (7) any combination of the foregoing methods of payment. In making its determination as to the type of consideration to accept, the Administrator shall consider if acceptance of such consideration may be reasonably expected to benefit the Company.

9. Exercise of Option.

(a) Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder shall be exercisable according to the terms hereof at such times and under such conditions as determined by the Administrator and set forth in the Option Agreement. Unless the Administrator provides otherwise, vesting of Options granted shall be tolled during any unpaid leave of absence. An Option may not be exercised for a fraction of a Share.

An Option shall be deemed exercised when the Company receives: (i) written or electronic notice of exercise (in accordance with the Option Agreement) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised. Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Option Agreement and the Plan. Shares issued upon exercise of an Option shall be issued in the name of the Optionee or, if requested by the Optionee, in the name of the Optionee and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Shares, notwithstanding the exercise of the Option. The Company shall issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 11 of the Plan.

Exercise of an Option in any manner shall result in a decrease in the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(b) Termination of Relationship as a Service Provider. If an Optionee ceases to be a Service Provider, such Optionee may exercise his or her Option within such period of time as is specified in the Option Agreement (of at least thirty (30) days) to the extent that the Option is vested on the date of termination (but in no event later than the expiration of the term of the Option as set forth in the Option Agreement). In the absence of a specified time in the Option Agreement, the Option shall remain exercisable for three (3) months following the Optionee’s termination. If, on the date of termination, the Optionee is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option shall revert to the Plan. If, after termination, the Optionee does

not exercise his or her Option within the time specified by the Administrator, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.

(c) Disability of Optionee. If an Optionee ceases to be a Service Provider as a result of the Optionee's Disability, the Optionee may exercise his or her Option within such period of time as is specified in the Option Agreement (of at least six (6) months) to the extent the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement). In the absence of a specified time in the Option Agreement, the Option shall remain exercisable for twelve (12) months following the Optionee's termination. If, on the date of termination, the Optionee is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option shall revert to the Plan. If, after termination, the Optionee does not exercise his or her Option within the time specified herein, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.

(d) Death of Optionee. If an Optionee dies while a Service Provider, the Option may be exercised within such period of time as is specified in the Option Agreement (of at least six (6) months) to the extent that the Option is vested on the date of death (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement) by the Optionee's estate or by a person who acquires the right to exercise the Option by bequest or inheritance. In the absence of a specified time in the Option Agreement, the Option shall remain exercisable for twelve (12) months following the Optionee's termination. If, at the time of death, the Optionee is not vested as to the entire Option, the Shares covered by the unvested portion of the Option shall immediately revert to the Plan. If the Option is not so exercised within the time specified herein, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.

(e) Buyout Provisions. The Administrator may at any time offer to buy out for a payment in cash or Shares, an Option previously granted, based on such terms and conditions as the Administrator shall establish and communicate to the Optionee at the time that such offer is made.

10. Non-Transferability of Options. The Options may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Optionee, only by the Optionee.

11. Adjustments Upon Changes in Capitalization, Merger or Asset Sale.

(a) Changes in Capitalization. Subject to any required action by the stockholders of the Company, the number of shares of Common Stock covered by each outstanding Option, and the number of shares of Common Stock which have been authorized for issuance under the Plan but as to which no Options have yet been granted or which have been returned to the Plan upon cancellation or expiration of an Option, as well as the price per share of Common Stock covered by each such outstanding Option, shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock, or any other increase or decrease in the number of issued shares of Common Stock effected without receipt of consideration by the Company or other change in the corporate structure of the Company affecting the Shares that the

Administrator determines is necessary to prevent diminution or enlargement of benefits or potential benefits intended to be made available under the Plan. The conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock subject to an Option.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator shall notify each Optionee as soon as practicable prior to the effective date of such proposed transaction. The Administrator in its discretion may provide for an Optionee to have the right to exercise his or her Option until fifteen (15) days prior to such transaction as to all of the Optioned Stock covered thereby, including Shares as to which the Option would not otherwise be exercisable. In addition, the Administrator may provide that any Company repurchase option applicable to any Shares purchased upon exercise of an Option shall lapse as to all such Shares, provided the proposed dissolution or liquidation takes place at the time and in the manner contemplated. To the extent it has not been previously exercised, an Option will terminate immediately prior to the consummation of such proposed action.

(c) Merger or Asset Sale. In the event of a merger of the Company with or into another corporation, or the sale of substantially all of the assets of the Company, each outstanding Option shall be assumed or an equivalent option or right substituted by the successor corporation or a Parent or Subsidiary of the successor corporation. In the event that the successor corporation refuses to assume or substitute for an Option (or portion thereof), the Optionee shall fully vest in and have the right to exercise the Option (or portion thereof) that is not assumed or substituted for as to all of the Optioned Stock, including Shares as to which it would not otherwise be vested or exercisable. If an Option is not assumed or substituted for in the event of a merger or sale of assets, the Administrator shall notify the Optionee in writing or electronically that the Option shall be fully exercisable for a period of fifteen (15) days from the date of such notice, and the Option shall terminate upon the expiration of such period. For the purposes of this paragraph, the Option shall be considered assumed if, following the merger or sale of assets, the option or right confers the right to purchase or receive, for each Share subject to the Option immediately prior to the merger or sale of assets, the consideration (whether stock, cash, or other securities or property) received in the merger or sale of assets by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the merger or sale of assets is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of the Option, for each Share subject to the Option, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the merger or sale of assets.

12. Time of Granting Options. The date of grant of an Option shall, for all purposes, be the date on which the Administrator makes the determination granting such Option, or such other

date as is determined by the Administrator. Notice of the determination shall be given to each Service Provider to whom an Option is so granted within a reasonable time after the date of such grant.

13. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Board may at any time amend, alter, suspend or terminate the Plan.

(b) Stockholder Approval. The Board shall obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

(c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan shall impair the rights of any Optionee, unless mutually agreed otherwise between the Optionee and the Administrator, which agreement must be in writing and signed by the Optionee and the Company. Termination of the Plan shall not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Options granted under the Plan prior to the date of such termination.

14. Conditions Upon Issuance of Shares.

(a) Legal Compliance. Shares shall not be issued pursuant to the exercise of an Option unless the exercise of such Option and the issuance and delivery of such Shares shall comply with Applicable Laws and shall be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise of an Option, the Administrator may require the person exercising such Option to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

15. Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.

16. Reservation of Shares. The Company, during the term of this Plan, shall at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.

17. Stockholder Approval. The Plan shall be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted. Such stockholder approval shall be obtained in the degree and manner required under Applicable Laws.

APPENDIX A

FLUIDIGM CORPORATION

1999 STOCK OPTION PLAN

Additional Terms and Conditions for Options received by Employees Resident in the Netherlands

The additional terms and conditions detailed below are to be read in conjunction with the Plan and the Option Agreement relating to Options granted to Employees resident in the Netherlands. Any terms and provisions not specifically defined below for Employees subject to the laws of the Netherlands will have the same meaning as defined in the Plan and the applicable Option Agreement.

1. Definitions. Notwithstanding the provisions of the Plan, the following definitions shall apply for Options granted to Employees resident in the Netherlands.

(a) Acknowledgement Date. "Acknowledgement Date" means the date upon which an Option Agreement is signed and returned to the Company (or the Employee's employer if so designated by the Company) by the Employee.

(c) Employee. "Employee" means any person permanently employed by the Company or any Parent or Subsidiary of the Company based upon such factors as are deemed appropriate by the Administrator in its discretion, subject to any requirments and provisions of the applicable Dutch laws, including the provisions of the Dutch Civil Code (*Burgerlijk Wetboek*). The term "Employee", however, shall not include an individual who, either by himself or through his Relative or through a corporate entity, holds, directly or indirectly, 5% or more of the equity of the Company.

(d) Relative. "Relative" means immediate relative, namely one's spouse, parent, parent of spouse, brother, sister, brother of spouse, sister of spouse or child of the person or spouse.

2. Eligibility. Notwithstanding the provisions of the Plan, Options granted to residents of the Netherlands may only be granted to Employees who, either by themselves or through a corporate entity or through his Relative, do not hold, directly or indirectly, 5% or more of the equity of the Company. Consultants resident in the Netherlands shall not be eligible to receive Options.

Options may be granted to Employees in accordance with the terms of the Plan and this Appendix A to the Plan as the Administrator deems appropriate. In determining which Employees may be granted Options, the Administrator will take into account whether will

provide additional incentive to Employees and whether such Options will promote the success of the Company's business.

3. Dutch Taxes. Notwithstanding the provisions of the Plan and pursuant to Section 4(b)(ix) of this Plan, the following shall apply for residents in the Netherlands

(a) All tax and social security consequences and obligations regarding any other compulsory payments arising from the grant, possesion or exercise of any Options, from the payment for, or the subsequent possesion or disposition of or from any other event or act of the Company (or the Employee's employer) or the Employee hereunder, shall be borne solely by the Employee, and the Employee shall indemnify the Company (or the Employee's employer) and hold it harmless against and from any and all liability for any such tax or social security payment, or interest or penalty thereon, including without limitation, liabilities relating to the necessity to withhold, or to have withheld, any such tax or social security payment from any payment made to the Employee.

(b) The Company (or the Employee's employer) is at any time entitled to withhold from wages payable to the Employee any tax and social security amounts due with respect to the grant or exercise of any Options.

(c) On the Acknowledgement Date, the Employee may deliver to the Company a signed written notice in accordance with Article 10(a)(3) of the Dutch Wage Tax Act 1964 (*Wet op de Loonbelasting 1964*) (hereafter: the "Written Notice") with respect to the Options. The Written Notice will indicate that Dutch withholding tax will be due upon exercise of the Options. If no such Written Notice has been received by the Company on the Acknowledgement Date, any withholding tax will automatically be due upon vesting of the Options.

The Company shall immediately send the Written Notice to the competent Dutch tax authorities. Notwithstanding the provisions under Section 9 of the Plan, if a Written Notice has been received by the Company on the Acknowledgement Date, the Options granted under Appendix A will not be exercisable until the competent Dutch tax authorities has received the Written Notice.

4. Merger or Asset Sale. Notwithstanding the provisions of Section 11(c), if the successor corporation (or any parent or subsidiary thereof) intends to assume or substitute each outstanding Option in a merger of the Company with or into another corporation, or the sale of substantially all of the assets of the Company and the rules and regulations governing Options granted to Employees in the Netherlands (the "Netherlands Options") do not permit assumption or substitution of the Netherlands Options in the same manner as other Options, then the Administrator, in its discretion, may provide for the termination of the Netherlands Options upon the consummation of the transaction or provide for the assumption or substitution of the Netherlands Options in a different manner than the assumption or substitution of other Options.

APPENDIX B

FLUIDIGM CORPORATION

1999 STOCK OPTION PLAN
(Added April 24, 2007)

Additional Terms and Conditions for Options received by Employees Resident in France

The additional terms and conditions detailed below are to be read in conjunction with the Plan and the Option Agreement relating to Options granted to Employees resident in France. Any terms and provisions not specifically defined below for Employees subject to the laws of France will have the same meaning as defined in the Plan and the applicable Option Agreement.

In order to promote compliance of the Plan with the principles set out by the French tax authorities in their regulations 4 N 2431 dated August 30, 1997, in furtherance of Article 80 bis III of the French Code Général des Impôts, any Option granted under the Plan to residents of France will be subject to the conditions stated below.

As a matter of principle, any provision included in the Plan, the Option Agreement or any other document evidencing the terms and conditions of an Option that would contravene any substantive principle set out in Articles L.225-177 to L.225-186 of the French Code de Commerce shall not be applicable to Optionees who are residents of France.

1. Definitions. Notwithstanding the provisions of the Plan, the following definitions shall apply for Options granted to Employees resident in France.

(a) Applicable Laws. "Applicable Laws" means the legal requirements relating to the administration of stock option plans under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and French corporate, securities, labor and tax laws.

(b) Employee. "Employee" means (i) any person employed by the Company or a branch of the Company or a Subsidiary in a salaried position within the meaning Applicable Laws, who does not own more than ten percent (10%) of the voting power of all classes of stock of the Company, or any Parent or Subsidiary, and who is a resident of the Republic of France or (ii) any person employed by the Company or a branch of the Company or a Subsidiary who is a resident of the Republic of France for tax purposes or who performs his or her duties in France and is subject to French income social security contributions on his or her remuneration.

(c) Fair Market Value. "Fair Market Value" means, as of any date, the dollar value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq Global Market or the Nasdaq

Global Select Market of the Nasdaq Stock Market, its Fair Market Value will be the average quotation price for the last twenty (20) days preceding the date of determination for such Common Stock (or the average closing bid for such twenty (20) day period, if no sales were reported) as quoted on such exchange or system and reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(ii) If the Common Stock is quoted on the Nasdaq Stock market (but not on the Nasdaq Global Market or Nasdaq Global Select Market thereof) or regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value will be the mean between the high bid and low asked prices for the Common Stock for the last twenty (20) days preceding the date of determination; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value thereof will be determined in good faith by the Administrator.

(d) Subsidiary. "Subsidiary" means any participating subsidiary of the Company located in the Republic of France and that falls within the definition of "subsidiary" within the meaning of Section L. 225-180 paragraph 1 of the French commercial code.

(e) Termination. "Termination" means if the Optionee is an Employee, the last day of any statutory or contractual notice period whether worked or not (provided, only the employer, and not the Optionee, may decide whether the Optionee works during the notice period) and irrespective of whether the termination of the employment agreement is due to resignation or dismissal of the Employee for any reason whatsoever; if the Optionee is a corporate officer as defined in Section 2 of this Appendix B, Termination means the date on which he or she effectively leaves his or her position as a corporate officer for any reason whatsoever.

2. Eligibility. Options granted pursuant to this Appendix B may be granted only to Employees, the *Président du conseil d'administration*, the *membres du directoire*, the *Directeur général*, the directeurs généraux délégués, the *Gérant* of a company with capital divided by shares; provided, however, that the *administrateurs* and the *membres du conseil de surveillance* who are also Employees of the Subsidiary in accordance with a valid employment agreement pursuant to Applicable Laws may be granted Options hereunder. For the purpose of this Appendix B, when applicable, the rules set forth for an Employee will be applicable to the aforementioned corporate officers.

3. Stock Subject to the Plan. The total number of Options outstanding which may be exercised for newly issued Shares may at no time exceed that number equal to one-third (1/3rd) of the Company's voting stock, whether preferred stock of the Company or Common Stock. If any Optioned Stock is to consist of reacquired Shares, such Optioned Stock must be purchased by the Company, in the limit of ten percent (10%) of its share capital, prior to the date of the grant of the corresponding new Option and must be reserved and set aside for such purposes. In addition, the new Option must be granted within one (1) year of the acquisition of the Shares underlying such new Option.

4. Limitations Upon Granting of Options.

(a) Declaration of Dividend; Capital Increase. To the extent applicable to the Company, Options cannot be granted during the twenty (20) trading days from (i) the date the Common Stock is trading on an ex-dividend basis or (ii) a capital increase.

(b) Non-Public Information. To the extent applicable to the Company, the Company will not grant Options during the closed periods required under Section L 225-177 of the French Commercial Code. As a result, notwithstanding any other provision of the Plan, Options cannot be granted:

(i) during the ten (10) trading days preceding and following the date on which the consolidated accounts, or, if unavailable, the annual accounts, are made public;

(ii) during the period between the date on which the Company's governing bodies (i.e., the Board) become aware of information which, if made public, could have a material impact on the price of the Shares, and the date ten (10) trading days after such information is made public.

(c) Right to Employment. Neither the Plan nor any Option will confer upon any Optionee any right with respect to continuing the Optionee's employment relationship with the Company or any Subsidiary.

5. Exercise Price. The exercise price for the Shares to be issued pursuant to exercise of an Option will be determined by the Administrator upon the date of grant of the Option and stated in the Option Agreement, but in no event will be less than the higher of (i) eighty percent (80%) of (A) the Fair Market Value on the date the Option is granted, or (B) if applicable, the average purchase price paid by the Company for such Shares, or (ii) the exercise price as determined under Section 8(a) of the Plan. The exercise price cannot be modified while an Option is outstanding, except as required by Applicable Laws.

6. Term of Option. The term of each Option will be as stated in the Option Agreement; provided, however, that the maximum term of an Option will not exceed ten (10) years from the date of grant of the Option.

7. Exercise of Option; Restriction on Sale.

(a) Except as otherwise explicitly set forth in the Option Agreement, Options granted hereunder may be not be exercised within one (1) year of the date the Option is granted (the "Initial Exercise Date") whether or not the Option has vested prior to such time; provided, however, that the Initial Exercise Date will be automatically adjusted to conform with any changes under Applicable Laws so that the length of time from the date of grant to the Initial Exercise Date when added to the length of time in which Shares may not be disposed of after the Initial Exercise Date as provided in Section 7(b) below, will allow for favorable tax and social security treatment under Applicable Laws. Thereafter, Options may be exercised to the extent they have vested.

An Option will be deemed exercised when the Company receives: (i) written or electronic notice of exercise (in accordance with the Option Agreement) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised together with any applicable withholding taxes and social security contributions. Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Option Agreement and the Plan. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 11 of the Plan and to the extent permitted by Applicable Law.

(b) The Shares subject to an Option may not be transferred, assigned or hypothecated in any manner otherwise than by will or by the laws of descent or distribution before the date three (3) years from the Initial Exercise Date, except for any events provided for in Article 91 ter of Annex II to the French tax code; provided, however, that the duration of this restriction on sale will be automatically adjusted to conform with any changes to the holding period required for favorable tax and social security treatment under Applicable Laws to the extent permitted under Applicable Laws.

(c) Termination of Employment Relationship. Upon Termination of an Optionee's status as an Employee (other than upon the Optionee's death or Disability), the Optionee may exercise his or her Option within such period of time as specified in the Option Agreement, and only to the extent that the Optionee was entitled to exercise it at the date of Termination (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement). If, at the date of Termination, the Optionee is not entitled to exercise his or her entire Option, the Shares covered by the unexercisable portion of the Option will revert to the Plan. If, after Termination, the Optionee does not exercise his or her Option within the time specified by the Administrator, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(d) Disability of Optionee. Upon Termination of an Optionee's status as an Employee terminates as a result of the Optionee's Disability, the Optionee may exercise his or her Option at any time within such period of time as specified in the Option Agreement, but only to the extent that the Optionee was entitled to exercise it at the date of such Termination (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement). If, at the date of Termination, the Optionee is not entitled to exercise his or her entire Option, the Shares covered by the unexercisable portion of the Option will revert to the Plan. If, after Termination, the Optionee does not exercise his or her Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(e) Death of Optionee. In the event of the death of an Optionee while an Employee, the Option may be exercised at any time within six (6) months following the date of death by the Optionee's estate or by a person who acquired the right to exercise the Option by bequest or inheritance, but only to the extent that the Optionee was entitled to exercise the Option at the date of

death. If, at the time of death, the Optionee was not entitled to exercise his or her entire Option, the Shares covered by the unexercisable portion of the Option will revert to the Plan. If, after death, the Optionee's estate or a person who acquired the right to exercise the Option by bequest or inheritance does not exercise the Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will immediately revert to the Plan.

8. Non-Transferability of Options. An Option may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Optionee, only by the Optionee.

9. Changes in Capitalization. If any adjustment provided for in Section 11(a) of the Plan to the exercise price and the number of shares of Common Stock covered by outstanding Options would violate Applicable Laws in such a way to jeopardize the favorable tax and social security treatment of this Plan together with this Appendix B and the Options granted thereunder, then no such adjustment will be made prior to the exercise of any such outstanding Option.

10. Information Statements to Optionees. The Company or its Subsidiary, as required under Applicable Laws, will provide to each Optionee, with copies to the appropriate governmental entities, such statements of information as required by the Applicable Laws.

11. Reporting to the Stockholders' Meeting. The Subsidiary of the Company, if required under Applicable Laws, will provide its stockholders with an annual report with respect to Options granted and/or exercised by its Employees in the financial year.

APPENDIX C

Neither this document, nor any option agreement connected with it, is an approved prospectus for the purposes of section 85(1) of the Financial Services and Markets Act 2000 ("FSMA") and no offer of transferable securities to the public (for the purposes of section 102B of FSMA) is being made in connection with the UK Sub-Plan of the Fluidigm Corporation 1999 Stock Option Plan (as amended April 24, 2007, January 29, 2008, April 24, 2008). The Sub-Plan is exclusively available to bona fide employees and former employees of Fluidigm Corporation and its subsidiaries, if any.

FLUIDIGM CORPORATION

UK SUB-PLAN OF THE
FLUIDIGM CORPORATION

1999 STOCK OPTION PLAN
(as amended April 24, 2007, January 29, 2008, and April 24, 2008)

(Added June 26, 2008)

Additional Terms and Conditions for Options received by Employees Resident in the UK.

This Sub-Plan is governed by the and all its provisions shall be identical to those of the Plan SAVE THAT (i) "Sub-Plan" shall be substituted for "Plan" where applicable, (except where the "Plan" is referred to below) and (ii) the following provisions shall be as stated in this Sub-Plan in order to accommodate the specific requirements of the laws of England and Wales and the appropriate UK tax legislation.

12. Section 1 - Purposes of the Plan

The words ", Directors and Consultants" shall be deleted.
The final sentence shall be deleted and replaced as follows;
"Options granted under the plan shall be unapproved options.

13. Section 2 - Definitions

The following definitions shall not apply to the Sub-Plan:
(h) "Consultant"

(n) "Incentive Stock Option"

(o) "Nonstatutory Stock Option"

The following definitions shall be deleted and replaced as follows:
(k) "Employee" means any person, including Officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. A Service Provider shall not

cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, any Subsidiary, or any successor. Neither service as a Director nor payment of a director's fee by the Company shall be sufficient to constitute "employment" by the Company.

(x) "Service Provider" means an Employee.

The following definitions shall be added:

(zi) "Unapproved Option" means an Option that is neither an HM Revenue & Customs approved Company Share Option Plan nor an Enterprise Management Incentives (EMI) Option.

14. Section 4 – Administration of the Plan

Section 4 (vii) shall be deleted in its entirety.

15. Section 5 – Eligibility

Sections 5 (a) shall be deleted and replaced as follows:
"(a) Employees may be granted Unapproved Stock Options."
Section 5 (b) shall be deleted in its entirety.

16. Section 6 – Term of Plan

Section 6 shall be deleted and replaced as follows:
This Sub-Plan shall become effective upon its adoption by the Board. It shall continue in effect for as long as the as the Plan is effective unless sooner terminated under Section 13 of the Plan.

17. Section 7 – Term of Option

The second sentence of Section 7 shall be deleted.

18. Section 8 – Option Exercise Price and Consideration

Section 8 (a) (i) shall be deleted in its entirety.
In Section 8 (a) (ii) the words "Nonstatutory Stock Option" shall be deleted and replaced with the words "Unapproved Option".
Section 8 (b) shall be deleted and replaced as follows:
"The consideration to be paid for the Shares to be issued upon exercise of an Option, including the method of payment, shall be determined by the Administrator. Such consideration may consist of (1) cash, (2) cheque, (3) consideration received by the Company under a cashless exercise program implemented by the Company in connection with the Plan, or (4) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws, (5) any combination of the foregoing

methods of payment. In making its determination as to the type of consideration to accept, the Administrator shall consider if acceptance of such consideration may be reasonably expected to benefit the Company.

19. Section 9 – Exercise of Option

Section 9(d) shall be amended by deleting the words "estate or by a person who acquires the right to exercise the Option by bequest or inheritance" and replacing them with the words "personal representatives".

20. Section 10 – Non-Transferability of Options

This section shall be deleted in its entirety and replaced as follows:

"The Option may not be transferred in any manner other than to the personal representatives on the death of the Optionee. The Option may be exercised during the lifetime of the Optionee only by the Optionee."

21. Section 17 – Stockholder Approval

This Section shall be deleted in its entirety and replaced as follows:

"**Withholding Taxes.** In the event that the Company determines that it is required to account to HM Revenue & Customs for income tax (under PAYE) or any other taxation provisions and primary class 1 National Insurance Contributions in the United Kingdom to the extent arising from the grant, exercise, assignment, release, cancellation or any other disposal of an Option or the Secondary NIC Liability (as defined in the Stock Option Agreement) as a result of the exercise of this Option, the Optionee, as condition to the exercise of this Option, shall make arrangements satisfactory to the Company to enable it to satisfy all such requirements. The Optionee shall also make arrangements satisfactory to the Company to enable it to satisfy any requirement to account for tax, if any, that may arise in connection with the disposition of Shares purchased by exercising this option."

Exhibit 10.2A

FLUIDIGM CORPORATION

1999 STOCK OPTION PLAN

STOCK OPTION AGREEMENT

Unless otherwise defined herein, the terms defined in the 1999 Stock Option Plan shall have the same defined meanings in this Stock Option Agreement (the "Option Agreement").

I. NOTICE OF STOCK OPTION GRANT

_____

_____

_____

You have been granted an option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan and this Option Agreement, as follows:

Date of Grant	_____
Vesting Commencement Date	_____
Exercise Price per Share	$_____
Total Number of Shares Granted	_____
Total Exercise Price	$_____
Type of Option:	_____ Incentive Stock Option
	_____ Nonstatutory Stock Option
Term/Expiration Date:	_____

Exercise and Vesting Schedule:

This Option shall be exercisable in whole or in part, and shall vest according to the following vesting schedule:

1/48th of the Shares subject to the Option shall vest each month following the Vesting Commencement Date set forth above, subject to Optionee's continuing to be a Service Provider on such dates.

Termination Period:

This Option may be exercised, to the extent it is then vested, for three months after Optionee ceases to be a Service Provider. Upon death or Disability of the Optionee, this Option may be exercised, to the extent it is then vested, for one year after Optionee ceases to be Service Provider. In no event shall this Option be exercised later than the Term/Expiration Date as provided above.

II. AGREEMENT

(a) Grant of Option. The Administrator of the Company hereby grants to the Optionee named in the Notice of Grant (the "Optionee"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Grant, at the exercise price per Share set forth in the Notice of Grant (the "Exercise Price"), and subject to the terms and conditions of the Plan, which is incorporated herein by reference. Subject to Section 13(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and this Option Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Grant as an Incentive Stock Option ("ISO"), this Option is intended to qualify as an Incentive Stock Option as defined in Section 422 of the Code. Nevertheless, to the extent that it exceeds the $100,000 rule of Code Section 422(d), this Option shall be treated as a Nonstatutory Stock Option ("NSO").

(b) Exercise of Option. This Option shall be exercisable during its term in accordance with the provisions of Section 9 of the Plan as follows:

(i) Right to Exercise.

(1) Subject to subsections 2(a)(ii) and 2(a)(iii) below, this Option shall be exercisable cumulatively according to the vesting schedule set forth in the Notice of Grant. Alternatively, at the election of the Optionee, this Option may be exercised in whole or in part at any time as to Shares which have not yet vested. Vested Shares shall not be subject to the Company's repurchase right (as set forth in the Restricted Stock Purchase Agreement, attached hereto as Exhibit C-1).

(2) As a condition to exercising this Option for unvested Shares, the Optionee shall execute the Restricted Stock Purchase Agreement.

(3) This Option may not be exercised for a fraction of a Share.

(ii) Method of Exercise. This Option shall be exercisable by delivery of an exercise notice in the form attached as Exhibit A (the "Exercise Notice") which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised, and such other representations and agreements as may be required by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares. This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Exercise Price.

No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise complies with Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to the Optionee on the date on which the Option is exercised with respect to such Shares.

(c) Optionee's Representations. In the event the Shares have not been registered under the Securities Act of 1933, as amended, at the time this Option is exercised, the Optionee shall, if required by the Company, concurrently with the exercise of all or any portion of this Option, deliver to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit B.

(d) Lock-Up Period. Optionee hereby agrees that, if so requested by the Company or any representative of the underwriters (the "Managing Underwriter") in connection with any registration of the offering of any securities of the Company under the Securities Act, Optionee shall not sell or otherwise transfer any Shares or other securities of the Company during the 180-day period (or such other period as may be requested in writing by the Managing Underwriter and agreed to in writing by the Company) (the "Market Standoff Period") following the effective date of a registration statement of the Company filed under the Securities Act. The Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such Market Standoff Period and Optionee agrees to enter into a market stand-off agreement in customary form consistent with this section with the managing underwriter.

(e) Method of Payment. Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of the Optionee:

(i) cash;

(ii) check;

(iii) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan; or

(iv) surrender of other Shares which, (i) in the case of Shares acquired upon exercise of an option, have been owned by the Optionee for more than six (6) months on the date of surrender, and (ii) have a Fair Market Value on the date of surrender equal to the aggregate Exercise Price of the Exercised Shares.

(f) Restrictions on Exercise. This Option may not be exercised until such time as the Plan has been approved by the shareholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any Applicable Law.

(g) Non-Transferability of Option. This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Optionee only by Optionee. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of the Optionee.

(h) Term of Option. This Option may be exercised only within the term set out in the Notice of Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option.

(i) Tax Consequences. Set forth below is a brief summary as of the date of this Option of some of the federal tax consequences of exercise of this Option and disposition of the Shares. THIS SUMMARY IS NECESSARILY INCOMPLETE, AND THE TAX LAWS AND REGULATIONS ARE SUBJECT TO CHANGE. THE OPTIONEE SHOULD CONSULT A TAX ADVISER BEFORE EXERCISING THIS OPTION OR DISPOSING OF THE SHARES.

(i) Exercise of NSO. There may be a regular federal income tax liability upon the exercise of an NSO. The Optionee will be treated as having received compensation income (taxable at ordinary income tax rates) equal to the excess, if any, of the Fair Market Value of the Exercised Shares on the date of exercise over the Exercise Price. If Optionee is an Employee or a former Employee, the Company will be required to withhold from Optionee's compensation or collect from Optionee and pay to the applicable taxing authorities an amount in cash equal to a percentage of this compensation income at the time of exercise, and may refuse to honor the exercise and refuse to deliver Shares if such withholding amounts are not delivered at the time of exercise.

(ii) Exercise of ISO. If this Option qualifies as an ISO, there will be no regular federal income tax liability upon the exercise of the Option, although the excess, if any, of the Fair Market Value of the Exercised Shares on the date of exercise over the Exercise Price will be treated as an adjustment to the alternative minimum tax for federal tax purposes and may subject the Optionee to the alternative minimum tax in the year of exercise.

(iii) Exercise of ISO Following Disability. If the Optionee ceases to be an Employee as a result of a disability that is not a total and permanent disability as defined in Section 22(e)(3) of the Code, to the extent permitted on the date of termination, the Optionee must exercise an ISO within three months of such termination for the ISO to be qualified as an ISO.

(iv) Disposition of Shares. In the case of an NSO, if Shares are held for at least one year, any gain realized on disposition of the Shares will be treated as long-term capital gain for federal income tax purposes. In the case of an ISO, if Shares transferred pursuant to the Option are held for at least one year after exercise and at least two years after the Date of Grant, any gain realized on disposition of the Shares will also be treated as long-term capital gain for federal income tax purposes. If Shares purchased under an ISO are disposed of within one year after exercise or two years after the Date of Grant, any gain realized on such disposition will be treated as compensation income (taxable at ordinary income rates) to the extent of the difference between the Exercise Price of the Exercised Shares and the lesser of (i) the Fair Market Value of the Exercised Shares on the date of exercise, or (ii) the sale price of the Exercised Shares. Different rules may apply if the Shares are subject to a substantial risk of forfeiture (within the meaning of Section 83 of the Code) at the time of purchase. Any additional gain will be taxed as capital gain, short-term depending on the period that the ISO Shares were held.

(v) Notice of Disqualifying Disposition of ISO Shares. If the Option granted to Optionee herein is an ISO, and if Optionee sells or otherwise disposes of any of the Shares acquired

pursuant to the ISO on or before the later of (i) the date two years after the Date of Grant, or (ii) the date one year after the date of exercise, the Optionee shall immediately notify the Company in writing of such disposition. Optionee agrees that Optionee may be subject to income tax withholding by the Company on the compensation income recognized by the Optionee.

(vi) Section 83(b) Election for Unvested Shares Purchased Pursuant to Options. With respect to the exercise of an Option for unvested Shares, an election (the "Election") may be filed by the Optionee with the Internal Revenue Service, within 30 days of the purchase of the Shares, electing pursuant to Section 83(b) of the Code to be taxed currently on any difference between the purchase price of the Shares and their Fair Market Value on the date of purchase. In the case of an NSO, this will result in a recognition of taxable income to the Optionee on the date of exercise, measured by the excess, if any, of the Fair Market Value of the Exercised Shares, at the time the Option is exercised over the purchase price for the Exercised Shares. Absent such an election, taxable income will be measured and recognized by Optionee at the time or times on which the Company's Repurchase Option lapses. In the case of an ISO, such an election will result in a recognition of income to the Optionee for alternative minimum tax purposes on the date of exercise, measured by the excess, if any, of the Fair Market Value of the Exercised Shares, at the time the Option is exercised, over the purchase price for the Exercised Shares. Absent such an election, alternative minimum taxable income will be measured and recognized by Optionee at the time or times on which the Company's Repurchase Option lapses. Optionee is strongly encouraged to seek the advice of his or her own tax consultants in connection with the purchase of the Shares and the advisability of filing of the Election under Section 83(b) of the Code. A form of Election under Section 83(b) is attached hereto as Exhibit C-5 for reference.

OPTIONEE ACKNOWLEDGES THAT IT IS OPTIONEE'S SOLE RESPONSIBILITY AND NOT THE COMPANY'S TO FILE TIMELY THE ELECTION UNDER SECTION 83(b), EVEN IF OPTIONEE REQUESTS THE COMPANY OR ITS REPRESENTATIVE TO MAKE THIS FILING ON OPTIONEE'S BEHALF.

(j) Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee. This Option Agreement is governed by the internal substantive laws but not the choice of law rules of the State of California.

(k) No Guarantee of Continued Service. OPTIONEE ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY (NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER). OPTIONEE FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT

INTERFERE IN ANY WAY WITH OPTIONEE'S RIGHT OR THE COMPANY'S RIGHT TO TERMINATE OPTIONEE'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

Optionee acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Optionee has reviewed the Plan and this Option in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Optionee further agrees to notify the Company upon any change in the residence address indicated below.

OPTIONEE:

_____

Name

Residence Address:

_____

_____

FLUIDIGM CORPORATION

By: _____

Title: _____

EXHIBIT A

1999 STOCK OPTION PLAN

EXERCISE NOTICE

Fluidigm Corporation
Attn: President
7100 Shoreline Court
South San Francisco, CA 94080

1. Exercise of Option. Effective as of today, _____, ____, the undersigned ("Optionee") hereby elects to exercise Optionee's option (the "Option") to purchase _____ shares of the Common Stock (the "Shares") of Fluidigm Corporation (the "Company") under and pursuant to the 1999 Stock Option Plan (the "Plan") and the Stock Option Agreement dated _____ (the "Option Agreement").

2. Delivery of Payment. Purchaser herewith delivers to the Company the full purchase price of the Shares, as set forth in the Option Agreement.

3. Representations of Optionee. Optionee acknowledges that Optionee has received, read and understood the Plan and the Option Agreement and agrees to abide by and be bound by their terms and conditions.

4. Rights as Shareholder. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a shareholder shall exist with respect to the optioned stock, notwithstanding the exercise of the Option. The Shares shall be issued to the Optionee as soon as practicable after the Option is exercised. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance except as provided in Section 11 of the Plan.

5. Company's Right of First Refusal. Before any Shares held by Optionee or any transferee (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section (the "Right of First Refusal").

(a) Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares (the "Offered Price"), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

(b) Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection (c) below.

(c) Purchase Price. The purchase price ("Purchase Price") for the Shares purchased by the Company or its assignee(s) under this Section shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

(d) Payment. Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within 30 days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(e) Holder's Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section, then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, provided that such sale or other transfer is consummated within 120 days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(f) Exception for Certain Family Transfers. Anything to the contrary contained in this Section notwithstanding, the transfer of any or all of the Shares during the Optionee's lifetime or on the Optionee's death by will or intestacy to the Optionee's immediate family or a trust for the benefit of the Optionee's immediate family shall be exempt from the provisions of this Section. "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section, and there shall be no further transfer of such Shares except in accordance with the terms of this Section.

(g) Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act of 1933, as amended.

6. Tax Consultation. Optionee understands that Optionee may suffer adverse tax consequences as a result of Optionee's purchase or disposition of the Shares. Optionee represents that Optionee has consulted with any tax consultants Optionee deems advisable in connection with the

purchase or disposition of the Shares and that Optionee is not relying on the Company for any tax advice.

7. Restrictive Legends and Stop-Transfer Orders.

(a) Legends. Optionee understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

> THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COMPANY COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.
>
> THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND RIGHT OF FIRST REFUSAL OPTIONS HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE EXERCISE NOTICE BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL ARE BINDING ON TRANSFEREES OF THESE SHARES.

(b) Stop-Transfer Notices. Optionee agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Exercise Notice or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

8. Successors and Assigns. The Company may assign any of its rights under this Exercise Notice to single or multiple assignees, and the terms and conditions of this Exercise Notice shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, the terms and conditions of this Exercise Notice shall be binding upon Optionee and his or her heirs, executors, administrators, successors and assigns.

9. Interpretation. Any dispute regarding the interpretation of this Exercise Notice shall be submitted by Optionee or by the Company forthwith to the Administrator which shall review such dispute at its next regular meeting. The resolution of such a dispute by the Administrator shall be final and binding on all parties.

10. Governing Law; Severability. This Exercise Notice is governed by the internal substantive laws, but not the choice of law rules, of the State of California.

11. Entire Agreement. The Plan and Option Agreement are incorporated herein by reference. This Exercise Notice, the Plan, the Restricted Stock Purchase Agreement, the Option Agreement and the Investment Representation Statement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee.

Submitted by:

OPTIONEE:

_____

Name

Address:

_____

_____

Accepted by:

FLUIDIGM CORPORATION

By: _____

Its: _____

Date Received: _____

EXHIBIT B

INVESTMENT REPRESENTATION STATEMENT

OPTIONEE	:	_____
COMPANY	:	FLUIDIGM CORPORATION
SECURITY	:	COMMON STOCK
AMOUNT	:	
DATE	:	

In connection with the purchase of the above-listed Securities, the undersigned Optionee represents to the Company the following:

(a) Optionee is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Optionee is acquiring these Securities for investment for Optionee's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Optionee acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Optionee's investment intent as expressed herein. In this connection, Optionee understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Optionee's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one year or any other fixed period in the future. Optionee further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Optionee further acknowledges and understands that the Company is under no obligation to register the Securities. Optionee understands that the certificate evidencing the Securities will be imprinted with a legend which prohibits the transfer of the Securities unless they are registered or such registration is not required in the opinion of counsel satisfactory to the Company, and with any other legend required under applicable state securities laws.

(c) Optionee is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Option to the Optionee, the exercise will be exempt from registration under the Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701

may be resold, subject to the satisfaction of certain of the conditions specified by Rule 144, including: (1) the resale being made through a broker in an unsolicited "broker's transaction" or in transactions directly with a market maker (as said term is defined under the Securities Exchange Act of 1934); and, in the case of an affiliate, (2) the availability of certain public information about the Company, (3) the amount of Securities being sold during any three month period not exceeding the limitations specified in Rule 144(e), and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Option, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which requires the resale to occur not less than one year after the later of the date the Securities were sold by the Company or the date the Securities were sold by an affiliate of the Company, within the meaning of Rule 144; and, in the case of acquisition of the Securities by an affiliate, or by a non-affiliate who subsequently holds the Securities less than two years, the satisfaction of the conditions set forth in sections (1), (2), (3) and (4) of the paragraph immediately above.

(d) Optionee further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption will be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Optionee understands that no assurances can be given that any such other registration exemption will be available in such event.

Signature of Optionee:

_____

Name

Date: _____, ____

EXHIBIT C-1

FLUIDIGM CORPORATION

1999 STOCK OPTION PLAN

RESTRICTED STOCK PURCHASE AGREEMENT

THIS AGREEMENT is made between _____ (the "Purchaser") and Fluidigm Corporation (the "Company") as of _____, _____.

Unless otherwise defined herein, the terms defined in the 1999 Stock Option Plan shall have the same defined meanings in this Agreement.

RECITALS

A. Pursuant to the exercise of the option granted to Purchaser under the Plan and pursuant to the Option Agreement dated _____ by and between the Company and Purchaser with respect to such grant (the "Option"), which Plan and Option Agreement are hereby incorporated by reference, Purchaser has elected to purchase _____ of those shares of Common Stock which have not become vested under the vesting schedule set forth in the Option Agreement ("Unvested Shares"). The Unvested Shares and the shares subject to the Option Agreement which have become vested are sometimes collectively referred to herein as the "Shares".

B. As required by the Option Agreement, as a condition to Purchaser's election to exercise the option, Purchaser must execute this Agreement, which sets forth the rights and obligations of the parties with respect to Shares acquired upon exercise of the Option.

1. Repurchase Option.

(a) If Purchaser's status as a Service Provider is terminated for any reason, including for cause, death, and Disability, the Company shall have the right and option to purchase from Purchaser, or Purchaser's personal representative, as the case may be, all of the Purchaser's Unvested Shares as of the date of such termination at the price paid by the Purchaser for such Shares (the "Repurchase Option").

(b) Upon the occurrence of such termination, the Company may exercise its Repurchase Option by delivering personally or by registered mail, to Purchaser (or his transferee or legal representative, as the case may be), within ninety (90) days of the termination, a notice in writing indicating the Company's intention to exercise the Repurchase Option and setting forth a date for closing not later than thirty (30) days from the mailing of such notice. The closing shall take place at the Company's office. At the closing, the holder of the certificates for the Unvested Shares being transferred shall deliver the stock certificate or certificates evidencing the Unvested Shares, and the Company shall deliver the purchase price therefor.

(c) At its option, the Company may elect to make payment for the Unvested Shares to a bank selected by the Company. The Company shall avail itself of this option by a notice in writing to Purchaser stating the name and address of the bank, date of closing, and waiving the closing at the Company's office.

(d) If the Company does not elect to exercise the Repurchase Option conferred above by giving the requisite notice within ninety (90) days following the termination, the Repurchase Option shall terminate.

(e) The Repurchase Option shall terminate in accordance with the vesting schedule contained in Optionee's Option Agreement.

2. Transferability of the Shares; Escrow.

(a) Purchaser hereby authorizes and directs the Secretary of the Company, or such other person designated by the Company, to transfer the Unvested Shares as to which the Repurchase Option has been exercised from Purchaser to the Company.

(b) To insure the availability for delivery of Purchaser's Unvested Shares upon repurchase by the Company pursuant to the Repurchase Option under Section 1, Purchaser hereby appoints the Secretary, or any other person designated by the Company as escrow agent, as its attorney-in-fact to sell, assign and transfer unto the Company, such Unvested Shares, if any, repurchased by the Company pursuant to the Repurchase Option and shall, upon execution of this Agreement, deliver and deposit with the Secretary of the Company, or such other person designated by the Company, the share certificates representing the Unvested Shares, together with the stock assignment duly endorsed in blank, attached hereto as Exhibit C-2. The Unvested Shares and stock assignment shall be held by the secretary in escrow, pursuant to the Joint Escrow Instructions of the Company and Purchaser attached as Exhibit C-3 hereto, until the Company exercises its Repurchase Option, until such Unvested Shares are vested, or until such time as this Agreement no longer is in effect. As a further condition to the Company's obligations under this Agreement, the spouse of the Purchaser, if any, shall execute and deliver to the Company the Consent of Spouse attached hereto as Exhibit C-4. Upon vesting of the Unvested Shares, the escrow agent shall promptly deliver to the Purchaser the certificate or certificates representing such Shares in the escrow agent's possession belonging to the Purchaser, and the escrow agent shall be discharged of all further obligations hereunder; provided, however, that the escrow agent shall nevertheless retain such certificate or certificates as escrow agent if so required pursuant to other restrictions imposed pursuant to this Agreement.

(c) The Company, or its designee, shall not be liable for any act it may do or omit to do with respect to holding the Shares in escrow and while acting in good faith and in the exercise of its judgment.

(d) Transfer or sale of the Shares is subject to restrictions on transfer imposed by any applicable state and federal securities laws. Any transferee shall hold such Shares subject to all the provisions hereof and the Exercise Notice executed by the Purchaser with respect to any Unvested Shares purchased by Purchaser and shall acknowledge the same by signing a copy of this Agreement.

3. Ownership, Voting Rights, Duties. This Agreement shall not affect in any way the ownership, voting rights or other rights or duties of Purchaser, except as specifically provided herein.

4. Legends. The share certificate evidencing the Shares issued hereunder shall be endorsed with the following legend (in addition to any legend required under applicable federal and state securities laws):

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS UPON TRANSFER AND RIGHTS OF REPURCHASE AS SET FORTH IN AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

5. Adjustment for Stock Split. All references to the number of Shares and the purchase price of the Shares in this Agreement shall be appropriately adjusted to reflect any stock split, stock dividend or other change in the Shares which may be made by the Company pursuant to Section 11 of the Plan after the date of this Agreement.

6. Notices. Notices required hereunder shall be given in person or by registered mail to the address of Purchaser shown on the records of the Company, and to the Company at their respective principal executive offices.

7. Survival of Terms. This Agreement shall apply to and bind Purchaser and the Company and their respective permitted assignees and transferees, heirs, legatees, executors, administrators and legal successors.

8. Section 83(b) Election. Purchaser hereby acknowledges that he or she has been informed that, with respect to the exercise of an Option for Unvested Shares, an election (the "Election") may be filed by the Purchaser with the Internal Revenue Service, within 30 days of the purchase of the exercised Shares, electing pursuant to Section 83(b) of the Code to be taxed currently on any difference between the purchase price of the exercised Shares and their Fair Market Value on the date of purchase. In the case of a Nonstatutory Stock Option, this will result in a recognition of taxable income to the Purchaser on the date of exercise, measured by the excess, if any, of the Fair Market Value of the exercised Shares, at the time the Option is exercised over the purchase price for the exercised Shares. Absent such an Election, taxable income will be measured and recognized by Purchaser at the time or times on which the Company's Repurchase Option lapses. In the case of an Incentive Stock Option, such an Election will result in a recognition of income to the Purchaser for alternative minimum tax purposes on the date of exercise, measured by the excess, if any, of the Fair Market Value of the exercised Shares, at the time the option is exercised, over the purchase price for the exercised Shares. Absent such an Election, alternative minimum taxable income will be measured and recognized by Purchaser at the time or times on which the Company's Repurchase Option lapses. Purchaser is strongly encouraged to seek the advice of his or her own tax consultants in connection with the purchase of the Shares and the advisability of filing of the Election under Section 83(b) of the Code. A form of Election under Section 83(b) is attached hereto as Exhibit C-5 for reference.

PURCHASER ACKNOWLEDGES THAT IT IS PURCHASER'S SOLE RESPONSIBILITY AND NOT THE COMPANY'S TO FILE TIMELY THE ELECTION UNDER SECTION 83(b) OF

THE CODE, EVEN IF PURCHASER REQUESTS THE COMPANY OR ITS REPRESENTATIVE TO MAKE THIS FILING ON PURCHASER'S BEHALF.

9. Representations. Purchaser has reviewed with his own tax advisors the federal, state, local and foreign tax consequences of this investment and the transactions contemplated by this Agreement. Purchaser is relying solely on such advisors and not on any statements or representations of the Company or any of its agents. Purchaser understands that he (and not the Company) shall be responsible for his own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

10. Governing Law. This Agreement shall be governed by the internal substantive laws, but not the choice of law rules, of the State of California.

Purchaser represents that he has read this Agreement and is familiar with its terms and provisions. Purchaser hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Board upon any questions arising under this Agreement.

IN WITNESS WHEREOF, this Agreement is deemed made as of the date first set forth above.

OPTIONEE:

_____
Name

Residence Address:

_____

_____

Dated: _____, ____

FLUIDIGM CORPORATION

By: _____

Title: _____

EXHIBIT C-2

ASSIGNMENT SEPARATE FROM CERTIFICATE

FOR VALUE RECEIVED I, _____, hereby sell, assign and transfer unto _____ _____ (_____) shares of the Common Stock of Fluidigm Corporation standing in my name of the books of said corporation represented by Certificate No. ____ herewith and do hereby irrevocably constitute and appoint _____ to transfer the said stock on the books of the within named corporation with full power of substitution in the premises.

This Stock Assignment may be used only in accordance with the Restricted Stock Purchase Agreement between Fluidigm Corporation and the undersigned dated _____, ____.

Dated: _____, ____ Signature: _____

Name

INSTRUCTIONS: Please do not fill in any blanks other than the signature line. The purpose of this assignment is to enable the Company to exercise its “repurchase option,” as set forth in the Agreement, without requiring additional signatures on the part of the Purchaser.

EXHIBIT C-3

JOINT ESCROW INSTRUCTIONS

_____, ___

Wilson Sonsini Goodrich & Rosati
Attn: Robert F. Kornegay
650 Page Mill Road
Palo Alto, CA 94304

Ladies and Gentlemen:

As Escrow Agent for both Fluidigm Corporation (the "Company"), and the undersigned purchaser of stock of the Company (the "Purchaser"), you are hereby authorized and directed to hold the documents delivered to you pursuant to the terms of that certain Restricted Stock Purchase Agreement ("Agreement") between the Company and the undersigned, in accordance with the following instructions:

1. In the event the Company and/or any assignee of the Company (referred to collectively for convenience herein as the "Company") exercises the Company's repurchase option set forth in the Agreement, the Company shall give to Purchaser and you a written notice specifying the number of shares of stock to be purchased, the purchase price, and the time for a closing hereunder at the principal office of the Company. Purchaser and the Company hereby irrevocably authorize and direct you to close the transaction contemplated by such notice in accordance with the terms of said notice.

2. At the closing, you are directed (a) to date the stock assignments necessary for the transfer in question, (b) to fill in the number of shares being transferred, and (c) to deliver the stock assignments, together with the certificate evidencing the shares of stock to be transferred, to the Company or its assignee, against the simultaneous delivery to you of the purchase price (by cash, a check, or some combination thereof) for the number of shares of stock being purchased pursuant to the exercise of the Company's repurchase option.

3. Purchaser irrevocably authorizes the Company to deposit with you any certificates evidencing shares of stock to be held by you hereunder and any additions and substitutions to said shares as defined in the Agreement. Purchaser does hereby irrevocably constitute and appoint you as Purchaser's attorney-in-fact and agent for the term of this escrow to execute with respect to such securities all documents necessary or appropriate to make such securities negotiable and to complete any transaction herein contemplated, including but not limited to the filing with any applicable state blue sky authority of any required applications for consent to, or notice of transfer of, the securities. Subject to the provisions of this paragraph 3, Purchaser shall exercise all rights and privileges of a stockholder of the Company while the stock is held by you.

4. Upon written request of the Purchaser, but no more than once per calendar year, unless the Company's repurchase option has been exercised, you will deliver to Purchaser a certificate or certificates representing so many shares of stock as are not then subject to the Company's repurchase

option. Within 120 days after cessation of Purchaser's continuous employment by or services to the Company, or any parent or subsidiary of the Company, you will deliver to Purchaser a certificate or certificates representing the aggregate number of shares held or issued pursuant to the Agreement and not purchased by the Company or its assignees pursuant to exercise of the Company's repurchase option.

5. If at the time of termination of this escrow you should have in your possession any documents, securities, or other property belonging to Purchaser, you shall deliver all of the same to Purchaser and shall be discharged of all further obligations hereunder.

6. Your duties hereunder may be altered, amended, modified or revoked only by a writing signed by all of the parties hereto.

7. You shall be obligated only for the performance of such duties as are specifically set forth herein and may rely and shall be protected in relying or refraining from acting on any instrument reasonably believed by you to be genuine and to have been signed or presented by the proper party or parties. You shall not be personally liable for any act you may do or omit to do hereunder as Escrow Agent or as attorney-in-fact for Purchaser while acting in good faith, and any act done or omitted by you pursuant to the advice of your own attorneys shall be conclusive evidence of such good faith.

8. You are hereby expressly authorized to disregard any and all warnings given by any of the parties hereto or by any other person or corporation, excepting only orders or process of courts of law and are hereby expressly authorized to comply with and obey orders, judgments or decrees of any court. In case you obey or comply with any such order, judgment or decree, you shall not be liable to any of the parties hereto or to any other person, firm or corporation by reason of such compliance, notwithstanding any such order, judgment or decree being subsequently reversed, modified, annulled, set aside, vacated or found to have been entered without jurisdiction.

9. You shall not be liable in any respect on account of the identity, authorities or rights of the parties executing or delivering or purporting to execute or deliver the Agreement or any documents or papers deposited or called for hereunder.

10. You shall not be liable for the outlawing of any rights under the Statute of Limitations with respect to these Joint Escrow Instructions or any documents deposited with you.

11. You shall be entitled to employ such legal counsel and other experts as you may deem necessary properly to advise you in connection with your obligations hereunder, may rely upon the advice of such counsel, and may pay such counsel reasonable compensation therefor.

12. Your responsibilities as Escrow Agent hereunder shall terminate if you shall cease to be an officer or agent of the Company or if you shall resign by written notice to each party. In the event of any such termination, the Company shall appoint a successor Escrow Agent.

13. If you reasonably require other or further instruments in connection with these Joint Escrow Instructions or obligations in respect hereto, the necessary parties hereto shall join in furnishing such instruments.

14. It is understood and agreed that should any dispute arise with respect to the delivery and/or ownership or right of possession of the securities held by you hereunder, you are authorized and directed to retain in your possession without liability to anyone all or any part of said securities until such disputes shall have been settled either by mutual written agreement of the parties concerned or by a final order, decree or judgment of a court of competent jurisdiction after the time for appeal has expired and no appeal has been perfected, but you shall be under no duty whatsoever to institute or defend any such proceedings.

15. Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery or upon deposit in the United States Post Office, by registered or certified mail with postage and fees prepaid, addressed to each of the other parties thereunto entitled at the following addresses or at such other addresses as a party may designate by ten days' advance written notice to each of the other parties hereto.

16. By signing these Joint Escrow Instructions, you become a party hereto only for the purpose of said Joint Escrow Instructions; you do not become a party to the Agreement.

17. This instrument shall be binding upon and inure to the benefit of the parties hereto, and their respective successors and permitted assigns.

18. These Joint Escrow Instructions shall be governed by the internal substantive laws, but not the choice of law rules, of the State of California.

PURCHASER:

_____

Name

FLUIDIGM CORPORATION

By: _____

Title: _____

ESCROW AGENT

Wilson Sonsini Goodrich & Rosati

_____

By: Robert F. Kornegay

Dated: _____, ____

EXHIBIT C-4

CONSENT OF SPOUSE

I, _____, spouse of _____, have read and approve the foregoing Restricted Stock Purchase Agreement (the "Agreement"). In consideration of granting of the right to my spouse to purchase shares of Fluidigm Corporation, as set forth in the Agreement, I hereby appoint my spouse as my attorney-in-fact in respect to the exercise of any rights under the Agreement and agree to be bound by the provisions of the Agreement insofar as I may have any rights in said Agreement or any shares issued pursuant thereto under the community property laws or similar laws relating to marital property in effect in the state of our residence as of the date of the signing of the foregoing Agreement.

Dated: _____ Signature: _____

EXHIBIT C-5

ELECTION UNDER SECTION 83(b)
OF THE INTERNAL REVENUE CODE OF 1986

The undersigned taxpayer hereby elects, pursuant to Sections 55 and 83(b) of the Internal Revenue Code of 1986, as amended, to include in taxpayer's gross income or alternative minimum taxable income, as the case may be, for the current taxable year the amount of any compensation taxable to taxpayer in connection with taxpayer's receipt of the property described below:

1. The name, address, taxpayer identification number and taxable year of the undersigned are as follows:

   NAME: TAXPAYER: _____ SPOUSE: _____

   ADDRESS: _____

   _____

   IDENTIFICATION NO.: TAXPAYER: _____ SPOUSE: _____

   TAXABLE YEAR:

2. The property with respect to which the election is made is described as follows: _____ shares (the "Shares") of the Common Stock of Fluidigm Corporation (the "Company").

3. The date on which the property was transferred is: _____, _____.

4. The property is subject to the following restrictions:

   The Shares may not be transferred and are subject to forfeiture under the terms of an agreement between the taxpayer and the Company. These restrictions lapse upon the satisfaction of certain conditions contained in such agreement.

5. The fair market value at the time of transfer, determined without regard to any restriction other than a restriction which by its terms will never lapse, of such property is:

   $_____.

6. The amount (if any) paid for such property is:

   $_____.

The undersigned has submitted a copy of this statement to the person for whom the services were performed in connection with the undersigned's receipt of the above-described property. The transferee of such property is the person performing the services in connection with the transfer of said property.

The undersigned understands that the foregoing election may not be revoked except with the consent of the Commissioner.

Dated: _____

_____

Taxpayer

The undersigned spouse of taxpayer joins in this election.

Dated: _____

_____

Spouse of Taxpayer

FLUIDIGM CORPORATION
1999 STOCK OPTION PLAN
STOCK OPTION AGREEMENT
(NSO for Consultants)

Unless otherwise defined herein, the terms defined in the 1999 Stock Option Plan shall have the same defined meanings in this Stock Option Agreement (the "Option Agreement").

I. NOTICE OF STOCK OPTION GRANT

Name
Address

You have been granted an option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan and this Option Agreement, as follows:

Date of Grant

Grant Number

Vesting Commencement Date

Exercise Price per Share

Total Number of Shares Granted

Total Exercise Price

Type of Option: _____ Incentive Stock Option

__X__ Nonstatutory Stock Option

Term/Expiration Date:

Exercise and Vesting Schedule:

This Option shall be exercisable in whole or in part, and shall vest according to the following vesting schedule:

[Vesting Schedule]

Termination Period:

This Option may be exercised to the extent it is then vested, for three months after Optionee ceases to be a Service Provider. Upon death or Disability of the Optionee, this Option may be exercised, to the extent it is then vested, for one year after Optionee ceases to be a Service Provider. In no event shall this Option be exercised later than the Term/Expiration Date as provided above. This Option may not be exercised with respect to unvested shares.

II. AGREEMENT

1. Grant of Option. The Administrator of the Company hereby grants to the Optionee named in the Notice of Grant (the "Optionee"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Grant, at the exercise price per Share set forth in the Notice of Grant (the "Exercise Price"), and subject to the terms and conditions of the Plan, which is incorporated herein by reference. Subject to Section 13(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and this Option Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Grant as an Incentive Stock Option ("ISO"), this Option is intended to qualify as an Incentive Stock Option as defined in Section 422 of the Code. Nevertheless, to the extent that it exceeds the $100,000 rule of Code Section 422(d), this Option shall be treated as a Nonstatutory Stock Option ("NSO").

2. Exercise of Option. This Option shall be exercisable during its term in accordance with the provisions of Section 9 of the Plan as follows:

(a) Right to Exercise.

(1) Subject to subsections 2(a)(ii) below, this Option shall be exercisable cumulatively according to the vesting schedule set forth in the Notice of Grant.

(2) This Option may not be exercised for a fraction of a Share.

(b) Method of Exercise. This Option shall be exercisable by delivery of an exercise notice in the form attached as Exhibit A (the "Exercise Notice") which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised, and such other representations and agreements as may be required by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares. This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Exercise Price.

No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise complies with Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to the Optionee on the date on which the Option is exercised with respect to such Shares.

3. Optionee's Representations. In the event the Shares have not been registered under the Securities Act of 1933, as amended, at the time this Option is exercised, the Optionee shall, if required by the Company, concurrently with the exercise of all or any portion of this Option, deliver to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit B.

4. Lock-Up Period. Optionee hereby agrees that, if so requested by the Company or any representative of the underwriters (the "Managing Underwriter") in connection with any registration

of the offering of any securities of the Company under the Securities Act, Optionee shall not sell or otherwise transfer any Shares or other securities of the Company during the 180-day period (or such other period as may be requested in writing by the Managing Underwriter and agreed to in writing by the Company) (the "Market Standoff Period") following the effective date of a registration statement of the Company filed under the Securities Act. The Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such Market Standoff Period and Optionee agrees to enter into a market stand-off agreement in customary form consistent with this section with the managing underwriter.

5. Method of Payment. Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of the Optionee:

(a) cash;

(b) check;

(c) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan; or

(d) surrender of other Shares which, (i) in the case of Shares acquired upon exercise of an option, have been owned by the Optionee for more than six (6) months on the date of surrender, and (ii) have a Fair Market Value on the date of surrender equal to the aggregate Exercise Price of the Exercised Shares.

6. Restrictions on Exercise. This Option may not be exercised until such time as the Plan has been approved by the stockholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any Applicable Law.

7. Non-Transferability of Option. This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Optionee only by Optionee. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of the Optionee.

8. Term of Option. This Option may be exercised only within the term set out in the Notice of Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option.

9. Tax Consequences. Set forth below is a brief summary as of the date of this Option of some of the federal tax consequences of exercise of this Option and disposition of the Shares. THIS SUMMARY IS NECESSARILY INCOMPLETE, AND THE TAX LAWS AND REGULATIONS ARE SUBJECT TO CHANGE. THE OPTIONEE SHOULD CONSULT A TAX ADVISER BEFORE EXERCISING THIS OPTION OR DISPOSING OF THE SHARES.

There may be a regular federal income tax liability upon the exercise of an NSO. The Optionee will be treated as having received compensation income (taxable at ordinary income tax rates) equal to the excess, if any, of the Fair Market Value of the Exercised Shares on the date of exercise over the Exercise Price. If Optionee is an Employee or a former Employee, the Company will be required to withhold from Optionee's compensation or collect from Optionee and pay to the applicable taxing authorities an amount in cash equal to a percentage of this compensation income at the time of exercise, and may refuse to honor the exercise and refuse to deliver Shares if such withholding amounts are not delivered at the time of exercise.

10. Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee. This Option Agreement is governed by the internal substantive laws but not the choice of law rules of the State of California.

11. No Guarantee of Continued Service. OPTIONEE ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY (NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER). OPTIONEE FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH OPTIONEE'S RIGHT OR THE COMPANY'S RIGHT TO TERMINATE OPTIONEE'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

Optionee acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Optionee has reviewed the Plan and this Option in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Optionee further agrees to notify the Company upon any change in the residence address indicated below.

OPTIONEE:

_____

Residence Address:

_____

_____

FLUIDIGM CORPORATION

By: _____

Title: _____

EXHIBIT A

1999 STOCK OPTION PLAN
EXERCISE NOTICE

Fluidigm Corporation
Attn: President
7000 Shoreline Court
Suite 100
South San Francisco, CA 94080

1. Exercise of Option. Effective as of today, _____, _____, the undersigned ("Optionee") hereby elects to exercise Optionee's option (the "Option") to purchase _____ shares of the Common Stock (the "Shares") of Fluidigm Corporation (the "Company") under and pursuant to the 1999 Stock Option Plan (the "Plan") and the Stock Option Agreement dated «Grant Date» (the "Option Agreement").

2. Delivery of Payment. Purchaser herewith delivers to the Company the full purchase price of the Shares, as set forth in the Option Agreement.

3. Representations of Optionee. Optionee acknowledges that Optionee has received, read and understood the Plan and the Option Agreement and agrees to abide by and be bound by their terms and conditions.

4. Rights as Stockholder. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the optioned stock, notwithstanding the exercise of the Option. The Shares shall be issued to the Optionee as soon as practicable after the Option is exercised. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance except as provided in Section 11 of the Plan.

5. Company's Right of First Refusal. Before any Shares held by Optionee or any transferee (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section (the "Right of First Refusal").

(a) Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares (the "Offered Price"), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

(b) Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection (c) below.

(c) Purchase Price. The purchase price ("Purchase Price") for the Shares purchased by the Company or its assignee(s) under this Section shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

(d) Payment. Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within 30 days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(e) Holder's Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section, then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, provided that such sale or other transfer is consummated within 120 days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(f) Exception for Certain Family Transfers. Anything to the contrary contained in this Section notwithstanding, the transfer of any or all of the Shares during the Optionee's lifetime or on the Optionee's death by will or intestacy to the Optionee's immediate family or a trust for the benefit of the Optionee's immediate family shall be exempt from the provisions of this Section. "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section, and there shall be no further transfer of such Shares except in accordance with the terms of this Section.

(g) Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act of 1933, as amended.

6. Tax Consultation. Optionee understands that Optionee may suffer adverse tax consequences as a result of Optionee's purchase or disposition of the Shares. Optionee represents that Optionee has consulted with any tax consultants Optionee deems advisable in connection with the

purchase or disposition of the Shares and that Optionee is not relying on the Company for any tax advice.

7. Restrictive Legends and Stop-Transfer Orders.

(a) Legends. Optionee understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

> THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COMPANY COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.
>
> THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND RIGHT OF FIRST REFUSAL OPTIONS HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE EXERCISE NOTICE BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL ARE BINDING ON TRANSFEREES OF THESE SHARES.

(b) Stop-Transfer Notices. Optionee agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Exercise Notice or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

8. Successors and Assigns. The Company may assign any of its rights under this Exercise Notice to single or multiple assignees, and the terms and conditions of this Exercise Notice shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, the terms and conditions of this Exercise Notice shall be binding upon Optionee and his or her heirs, executors, administrators, successors and assigns.

9. Interpretation. Any dispute regarding the interpretation of this Exercise Notice shall be submitted by Optionee or by the Company forthwith to the Administrator which shall review such dispute at its next regular meeting. The resolution of such a dispute by the Administrator shall be final and binding on all parties.

10. Governing Law; Severability. This Exercise Notice is governed by the internal substantive laws, but not the choice of law rules, of the State of California.

11. Entire Agreement. The Plan and Option Agreement are incorporated herein by reference. This Exercise Notice, the Plan, the Restricted Stock Purchase Agreement, the Option Agreement and the Investment Representation Statement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee.

Submitted by:

OPTIONEE:

_____

Address:

_____

_____

Accepted by:

FLUIDIGM CORPORATION

By:

Its: _____

Date Received: _____

EXHIBIT B

INVESTMENT REPRESENTATION STATEMENT

OPTIONEE :
COMPANY : FLUIDIGM CORPORATION
SECURITY : COMMON STOCK
AMOUNT :
DATE :

In connection with the purchase of the above-listed Securities, the undersigned Optionee represents to the Company the following:

(a) Optionee is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Optionee is acquiring these Securities for investment for Optionee's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Optionee acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Optionee's investment intent as expressed herein. In this connection, Optionee understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Optionee's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one year or any other fixed period in the future. Optionee further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Optionee further acknowledges and understands that the Company is under no obligation to register the Securities. Optionee understands that the certificate evidencing the Securities will be imprinted with a legend which prohibits the transfer of the Securities unless they are registered or such registration is not required in the opinion of counsel satisfactory to the Company, and with any other legend required under applicable state securities laws.

(c) Optionee is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Option to the Optionee, the exercise will be exempt from registration under

the Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701 may be resold, subject to the satisfaction of certain of the conditions specified by Rule 144, including: (1) the resale being made through a broker in an unsolicited "broker's transaction" or in transactions directly with a market maker (as said term is defined under the Securities Exchange Act of 1934); and, in the case of an affiliate, (2) the availability of certain public information about the Company, (3) the amount of Securities being sold during any three month period not exceeding the limitations specified in Rule 144(e), and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Option, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which requires the resale to occur not less than one year after the later of the date the Securities were sold by the Company or the date the Securities were sold by an affiliate of the Company, within the meaning of Rule 144; and, in the case of acquisition of the Securities by an affiliate, or by a non-affiliate who subsequently holds the Securities less than two years, the satisfaction of the conditions set forth in sections (1), (2), (3) and (4) of the paragraph immediately above.

(d) Optionee further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption will be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Optionee understands that no assurances can be given that any such other registration exemption will be available in such event.

Signature of Optionee:

_____

Date: _____

FLUIDIGM CORPORATION
1999 STOCK OPTION PLAN
INTERNATIONAL STOCK OPTION AGREEMENT

Unless otherwise defined herein, the terms defined in the 1999 Stock Option Plan (or the applicable appendix thereunder) shall have the same defined meanings in this Stock Option Agreement (the "Option Agreement").

I. NOTICE OF STOCK OPTION GRANT

Name
Address

You have been granted an option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan (and the applicable appendix thereunder, if any) and this Option Agreement, as follows:

Date of Grant		
Grant Number:		
Vesting Commencement Date		
Exercise Price per Share	U.S.$	
Total Number of Shares Granted		
Total Exercise Price	U.S.$	
Type of Option:	___	Incentive Stock Option
	X	Nonstatutory Stock Option
Term/Expiration Date:		

Exercise and Vesting Schedule:

This Option shall be exercisable in whole or in part, and shall vest according to the following vesting schedule:

[Vesting Schedule]

Termination Period:

This Option may be exercised, to the extent it is then vested, for three months after Optionee ceases to be a Service Provider. Upon death or Disability of the Optionee, this Option may be exercised, to the extent it is then vested, for one year after Optionee ceases to be Service Provider. In no event shall this Option be exercised later than the Term/Expiration Date as provided above.

II. AGREEMENT

1. Grant of Option. The Administrator of the Company hereby grants to the Optionee named in the Notice of Grant (the "Optionee"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Grant, at the exercise price per Share set forth in the Notice of Grant (the "Exercise Price"), and subject to the terms and conditions of the Plan, which is incorporated herein by reference. Subject to Section 13(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan (including any applicable appendix thereunder) and this Option Agreement, the terms and conditions of the Plan (including any applicable appendix thereunder) shall prevail.

If designated in the Notice of Grant as an Incentive Stock Option ("ISO"), this Option is intended to qualify as an Incentive Stock Option as defined in Section 422 of the Code. Nevertheless, to the extent that it exceeds the $100,000 rule of Code Section 422(d), this Option shall be treated as a Nonstatutory Stock Option ("NSO").

2. Exercise of Option. This Option shall be exercisable during its term in accordance with the provisions of Section 9 of the Plan as follows:

(a) Right to Exercise. This Option shall be exercisable during its term in accordance with the Vesting Schedule set out in the Notice of Grant and with the applicable provisions of the Plan and this Option Agreement.

(b) Method of Exercise. This Option shall be exercisable by delivery of an exercise notice in the form attached as Exhibit A (the "Exercise Notice") which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised, and such other representations and agreements as may be required by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares. This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Exercise Price.

No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise complies with Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to the Optionee on the date on which the Option is exercised with respect to such Shares.

3. Optionee's Representations. In the event the Shares have not been registered under the Securities Act of 1933, as amended, at the time this Option is exercised, the Optionee shall, if required by the Company, concurrently with the exercise of all or any portion of this Option, deliver to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit B.

4. Lock-Up Period. Optionee hereby agrees that, if so requested by the Company or any representative of the underwriters (the "Managing Underwriter") in connection with any registration of the offering of any securities of the Company under the Securities Act, Optionee shall not sell or otherwise transfer any Shares or other securities of the Company during the 180-day period (or such other period as may be requested in writing by the Managing Underwriter and agreed to in writing by the Company) (the "Market Standoff Period") following the effective date of a registration statement of the Company filed under the Securities Act. The Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such Market Standoff Period and Optionee agrees to enter into a market stand-off agreement in customary form consistent with this section with the managing underwriter.

5. Method of Payment. Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of the Optionee:

(a) cash;

(b) check;

(c) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan; or

(d) surrender of other Shares, provided that Shares acquired from the Company (i) have been owned by the Optionee and not subject to a substantial risk of forfeiture for more than six (6) months on the date of surrender, and (ii) have a Fair Market Value on the date of surrender equal to the aggregate Exercise Price of the Exercised Shares.

6. Restrictions on Exercise. This Option may not be exercised until such time as the Plan has been approved by the stockholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any Applicable Law.

7. Non-Transferability of Option. This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Optionee only by Optionee. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of the Optionee.

8. Term of Option. This Option may be exercised only within the term set out in the Notice of Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option.

9. Tax Obligations.

(a) Withholding. Optionee agrees to make appropriate arrangements with the Company (or the Parent or Subsidiary employing or retaining Optionee) for the satisfaction of all Federal, state, local and foreign income and employment tax withholding requirements as well as social security charges applicable to the vesting of the Option, the exercise of the Option or the disposition of any Shares acquired upon exercise. In this regard, Optionee authorizes the Company (and/or the Parent or Subsidiary employing or retaining Optionee) to withhold all applicable taxes legally payable by Optionee from the Optionee's wages or other cash compensation paid to Optionee by the Company (and/or the Parent or Subsidiary employing or retaining Optionee) or from proceeds from the sale of Shares acquired upon exercise of the Option in an amount sufficient to cover such tax obligations. Optionee acknowledges and agrees that the Company may refuse to honor the exercise and refuse to deliver Shares if such withholding amounts are not delivered at the time of exercise.

(b) Tax Consultation. Optionee understands that he or she may suffer adverse tax consequences as a result of Optionee's purchase or disposition of the Shares. Optionee represents that he or she will consult with any tax advisors Optionee deems appropriate in connection with the purchase or disposition of the Shares and that Optionee is not relying on the Company for any tax advice.

10. Acknowledgements.

(a) Optionee acknowledges receipt of a copy of the Plan (including any applicable appendixes thereunder) and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Optionee has reviewed the Plan (including any applicable appendixes thereunder) and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Optionee further agrees to notify the Company upon any change in the residence address indicated below.

(b) The Company (and not Optionee's employer) is granting the Option. The Company will administer the Plan from outside Optionee's country of residence and that United States of America law will govern all Options granted under the Plan.

(c) That benefits and rights provided under the Plan are wholly discretionary and, although provided by the Company, do not constitute regular or periodic payments. The benefits and rights provided under the Plan are not to be considered part of Optionee' s salary or compensation for purposes of calculating any severance, resignation, redundancy or other end of service payments, vacation, bonuses, long-term service awards, indemnification, pension or retirement benefits, or any other payments, benefits or rights of any kind. Optionee waives any and all rights to compensation

or damages as a result of the termination of employment with the Company for any reason whatsoever insofar as those rights result or may result from:

(1) the loss or diminution in value of such rights under the Plan, or

(2) Optionee ceases to have any rights under, or ceases to be entitled to any rights under the Plan as a result of such termination.

(d) The grant of the Option, and any future grant of Options under the Plan is entirely voluntary, and at the complete discretion of the Company. Neither the grant of the Option nor any future grant of an Option by the Company will be deemed to create any obligation to grant any further Options, whether or not such a reservation is explicitly stated at the time of such a grant. The Company has the right, at any time to amend, suspend or terminate the Plan.

(e) The Plan will not be deemed to constitute, and will not be construed by Optionee to constitute, part of the terms and conditions of employment, and that the Company will not incur any liability of any kind to Optionee as a result of any change or amendment, or any cancellation, of the Plan at any time.

(f) Participation in the Plan will not be deemed to constitute, and will not be deemed by Optionee to constitute, an employment or labor relationship of any kind with the Company.

(g) By entering into this Option Agreement, and as a condition of the grant of the Option, Optionee consents to the collection, use, and transfer of personal data as described in this subsection to the full extent permitted by and in full compliance with Applicable Law.

(i) Optionee understands that the Company and its Subsidiaries hold certain personal information about the Optionee, including, but not limited to, name, home address and telephone number, date of birth, social insurance number, salary, nationality, job title, any Shares or directorships held in the Company, details of all Options or other entitlement to Shares awarded, canceled, exercised, vested, unvested, or outstanding in Optionee's favor, for the purpose of managing and administering the Plan ("Data").

(ii) Optionee further understands that the Company and/or its Subsidiaries will transfer Data among themselves as necessary for the purposes of implementation, administration, and management of Optionee's participation in the Plan, and that the Company and/or its Subsidiary may each further transfer Data to any third parties assisting the Company in the implementation, administration, and management of the Plan ("Data Recipients").

(iii) Optionee understands that these Data Recipients may be located in Optionee's country of residence or elsewhere, such as the United States. Optionee authorizes the Data Recipients to receive, possess, use, retain, and transfer Data in electronic or other form, for the purposes of implementing, administering, and managing Optionee's participation in the Plan, including any transfer of such Data, as may be required for the administration of the Plan and/or the

subsequent holding of Shares on Optionee' s behalf, to a broker or third party with whom the Shares acquired on exercise may be deposited.

(iv) Optionee understands that Optionee may, at any time, review the Data, request that any necessary amendments be made to it, or withdraw Optionee's consent herein in writing by contacting the Company. Optionee further understands that withdrawing consent may affect Optionee's ability to participate in the Plan.

(h) Optionee has received the terms and conditions of this Option Agreement and any other related communications, and Optionee consents to having received these documents in English.

11. Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee. This Option Agreement is governed by the internal substantive laws but not the choice of law rules of the State of California.

12. No Guarantee of Continued Service. OPTIONEE ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY (NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER). OPTIONEE FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH OPTIONEE'S RIGHT OR THE COMPANY'S RIGHT TO TERMINATE OPTIONEE'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

Optionee acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Optionee has reviewed the Plan and this Option in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Optionee further agrees to notify the Company upon any change in the residence address indicated below.

[Signature Page Follows]

OPTIONEE:

_____

Residence Address:

_____

_____

_____

FLUIDIGM CORPORATION

By: _____

Title: _____

EXHIBIT A

1999 STOCK OPTION PLAN

EXERCISE NOTICE

Fluidigm Corporation
Attn: President
7000 Shoreline Court
Suite 100
South San Francisco, CA 94080

1. Exercise of Option. Effective as of today, _____, ____, the undersigned ("Optionee") hereby elects to exercise Optionee's option (the "Option") to purchase _____ shares of the Common Stock (the "Shares") of Fluidigm Corporation (the "Company") under and pursuant to the 1999 Stock Option Plan, including any applicable appendixes thereunder (collectively, the "Plan"), and the Stock Option Agreement dated «GrantDate» (the "Option Agreement").

2. Delivery of Payment. Optionee herewith delivers to the Company the full purchase price of the Shares, as set forth in the Option Agreement, and any and all withholding taxes due in connection with the exercise of the Option.

3. Representations of Optionee. Optionee acknowledges that Optionee has received, read and understood the Plan and the Option Agreement and agrees to abide by and be bound by their terms and conditions.

4. Rights as Stockholder. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the optioned stock, notwithstanding the exercise of the Option. The Shares shall be issued to the Optionee as soon as practicable after the Option is exercised. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance except as provided in Section 11 of the Plan.

5. Company's Right of First Refusal. Before any Shares held by Optionee or any transferee (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section (the "Right of First Refusal").

(a) Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the

Shares (the "Offered Price"), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

(b) Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection (c) below.

(c) Purchase Price. The purchase price ("Purchase Price") for the Shares purchased by the Company or its assignee(s) under this Section shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

(d) Payment. Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within 30 days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(e) Holder's Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section, then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, provided that such sale or other transfer is consummated within 120 days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(f) Exception for Certain Family Transfers. Anything to the contrary contained in this Section notwithstanding, the transfer of any or all of the Shares during the Optionee's lifetime or on the Optionee's death by will or intestacy to the Optionee's immediate family or a trust for the benefit of the Optionee's immediate family shall be exempt from the provisions of this Section. "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section, and there shall be no further transfer of such Shares except in accordance with the terms of this Section.

(g) Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the first sale of Common Stock of the Company to the general public

pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act of 1933, as amended.

6. Tax Consultation. Optionee understands that Optionee may suffer adverse tax consequences as a result of Optionee's purchase or disposition of the Shares. Optionee represents that Optionee has consulted with any tax consultants Optionee deems advisable in connection with the purchase or disposition of the Shares and that Optionee is not relying on the Company for any tax advice.

7. Restrictive Legends and Stop-Transfer Orders.

(a) Legends. Optionee understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COMPANY COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND RIGHT OF FIRST REFUSAL OPTIONS HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE EXERCISE NOTICE BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER FOR A PERIOD NOT TO EXCEED 180 DAYS FOLLOWING THE EFFECTIVE DATE OF UNDERWRITTEN PUBLIC OFFERING OF THE COMPANY'S SECURITIES AND MAY NOT BE SOLD OR OTHERWISE DISPOSED OF BY THE HOLDER WITHOUT THE CONSENT OF THE COMPANY OR THE MANAGING UNDERWRITER.

(b) Stop-Transfer Notices. Optionee agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Exercise Notice or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

8. Successors and Assigns. The Company may assign any of its rights under this Exercise Notice to single or multiple assignees, and the terms and conditions of this Exercise Notice shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, the terms and conditions of this Exercise Notice shall be binding upon Optionee and his or her heirs, executors, administrators, successors and assigns.

9. Interpretation. Any dispute regarding the interpretation of this Exercise Notice shall be submitted by Optionee or by the Company forthwith to the Administrator which shall review such dispute at its next regular meeting. The resolution of such a dispute by the Administrator shall be final and binding on all parties.

10. Governing Law; Severability. This Exercise Notice is governed by the internal substantive laws, but not the choice of law rules, of the State of California.

11. Entire Agreement. The Plan and Option Agreement are incorporated herein by reference. This Exercise Notice, the Plan, the Restricted Stock Purchase Agreement, the Option Agreement and the Investment Representation Statement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee.

Submitted by:	Accepted by:
OPTIONEE:	FLUIDIGM CORPORATION
_____	By: _____
	Its: _____
Address:	Date Received: _____
_____	
_____	
_____	

EXHIBIT B

INVESTMENT REPRESENTATION STATEMENT

OPTIONEE	:	
COMPANY	:	FLUIDIGM CORPORATION
SECURITY	:	COMMON STOCK
AMOUNT	:	
DATE	:	

In connection with the purchase of the above-listed Securities, the undersigned Optionee represents to the Company the following:

(a) Optionee is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Optionee is acquiring these Securities for investment for Optionee's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Optionee acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Optionee's investment intent as expressed herein. In this connection, Optionee understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Optionee's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one year or any other fixed period in the future. Optionee further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Optionee further acknowledges and understands that the Company is under no obligation to register the Securities. Optionee understands that the certificate evidencing the Securities will be imprinted with a legend which prohibits the transfer of the Securities unless they are registered or such registration is not required in the opinion of counsel satisfactory to the Company, and with any other legend required under applicable state securities laws.

(c) Optionee is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Option to the Optionee, the exercise will be exempt from registration under

the Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701 may be resold, subject to the satisfaction of certain of the conditions specified by Rule 144, including: (1) the resale being made through a broker in an unsolicited "broker's transaction" or in transactions directly with a market maker (as said term is defined under the Securities Exchange Act of 1934); and, in the case of an affiliate, (2) the availability of certain public information about the Company, (3) the amount of Securities being sold during any three month period not exceeding the limitations specified in Rule 144(e), and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Option, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which requires the resale to occur not less than one year after the later of the date the Securities were sold by the Company or the date the Securities were sold by an affiliate of the Company, within the meaning of Rule 144; and, in the case of acquisition of the Securities by an affiliate, or by a non-affiliate who subsequently holds the Securities less than two years, the satisfaction of the conditions set forth in sections (1), (2), (3) and (4) of the paragraph immediately above.

(d) Optionee further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption will be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Optionee understands that no assurances can be given that any such other registration exemption will be available in such event.

Signature of Optionee:

_____

Date: _____, ____

THIS OPTION AGREEMENT AMENDS AND RESTATES AND SUPERSEDES IN ITS ENTIRETY THE OPTION AGREEMENT DATED MAY 8, 2007 BETWEEN THE OPTIONEE IDENTIFIED BELOW AND FLUIDIGM CORPORATION (THE "ORIGINAL AGREEMENT"). THE UNDERSIGNED OPTIONEE ACKNOWLEDGES AND AGREES THAT THE ORIGINAL AGREEMENT WAS PREPARED ON THE COMPANY'S STANDARD FORM OF INTERNATIONAL AGREEMENT AND NOT THE FORM APPROVED FOR ISSUANCE TO RESIDENTS OF FRANCE AND PURSUANT TO FRENCH LAW. THE UNDERSIGNED OPTIONEE AGREES THAT ALL RIGHTS WITH RESPECT TO THE OPTION GRANTED PURSUANT TO THE ORIGINAL AGREEMENT SHALL BE GOVERNED BY THIS INSTRUMENT AND THE COMPANY'S 1999 STOCK PLAN, AND THE ORIGINAL AGREEMENT SHALL HAVE NO FURTHER FORCE OR EFFECT.

FLUIDIGM CORPORATION

1999 STOCK OPTION PLAN

FRENCH STOCK OPTION AGREEMENT

Unless otherwise defined herein, the terms defined in the 1999 Stock Option Plan (or the applicable appendix thereunder) shall have the same defined meanings in this Stock Option Agreement (the "Option Agreement").

I. NOTICE OF STOCK OPTION GRANT

Name
Address

You have been granted an option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan (and the applicable appendix thereunder, if any) and this Option Agreement, as follows:

Date of Grant		
Grant Number		
Vesting Commencement Date		
Exercise Price per Share	U.S.$	
Total Number of Shares Granted		
Total Exercise Price	U.S.$	
Type of Option:	____	Incentive Stock Option
	X	Nonstatutory Stock Option

Term/Expiration Date:

Exercise and Vesting Schedule:

This Option shall be exercisable in whole or in part, and shall vest according to the following vesting schedule:

[Vesting Schedule]

Restriction on Sale:

The Shares may not be transferred, assigned or hypothecated in any manner otherwise than by will or by the laws of descent or distribution before the date three (3) years after the Initial Exercise Date (the "Holding Period"), except upon the occurrence of an event provided for by Article 91 ter of Annex II to the French Tax Code.

Optionee shall be obligated to have Shares held pursuant to an escrow arrangement established by the Company, in order to insure compliance with the Holding Period and so that the Company may sufficiently track the Shares acquired upon exercise of the Option and the Company shall be given sufficient access to any account Optionee may have with respect to any such Shares so that the Company may correctly provide any required reports to the French taxing authorities as required by Applicable Laws. Optionee hereby authorizes and directs the Company to hold all Shares exercised subject to this Option under the Escrow Provisions attached hereto as Exhibit B, for the duration of the Holding Period or until such time as this Agreement is no longer in effect. Optionee hereby appoints the Secretary, or any other person designated by the Company as escrow agent and shall, upon execution of this Agreement, deliver and deposit with the Secretary of the Company, or such other person designated by the Company, the share certificates representing the Shares.

The Company, or its designee, shall not be liable for any act it may do or omit with respect to holding the Shares in escrow and while acting in good faith and in the exercise of its judgment.

Termination Period:

This Option will be exercisable for three (3) months after Optionee ceases to be a Service Provider, unless such termination is due to Optionee's death or Disability, in which case this Option will be exercisable for one (1) year after Optionee ceases to be Service Provider in the event of Optionee's Disability and six (6) months after Optionee ceases to be a Service Provider in the event of Optionee's death. Notwithstanding the foregoing, in no event may this Option be exercised after the Term/Expiration Date as provided above.

II. AGREEMENT

1. Grant of Option. The Administrator of the Company hereby grants to the Optionee named in the Notice of Grant (the "Optionee"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Grant, at the exercise price per Share set forth in the Notice of Grant (the

"Exercise Price"), and subject to the terms and conditions of the Plan, which is incorporated herein by reference. Subject to Section 13(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan (including any applicable appendix thereunder) and this Option Agreement, the terms and conditions of the Plan (including any applicable appendix thereunder) shall prevail.

If designated in the Notice of Grant as an Incentive Stock Option ("ISO"), this Option is intended to qualify as an Incentive Stock Option as defined in Section 422 of the Code. Nevertheless, to the extent that it exceeds the $100,000 rule of Code Section 422(d), this Option shall be treated as a Nonstatutory Stock Option ("NSO").

2. Exercise of Option. This Option shall be exercisable during its term in accordance with the provisions of Section 9 of the Plan as follows:

(a) Right to Exercise. This Option shall be exercisable during its term in accordance with the Vesting Schedule set out in the Notice of Grant and with the applicable provisions of the Plan and this Option Agreement.

(b) Method of Exercise. This Option shall be exercisable by delivery of an exercise notice to the Company, in the form attached as Exhibit A (the "Exercise Notice") or in a manner and pursuant to such procedures as the Administrator may determine, which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised (the "Exercised Shares"), and such other representations and agreements as may be required by the Company and/or the Subsidiary pursuant to the provisions of the Plan (including Appendix B). Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Optioned Stock, notwithstanding the exercise of the Option. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance of the Shares, except as provided in Appendix B of the Plan. The Exercise Notice shall be signed by Optionee and shall be delivered in person or by certified mail to the Secretary of the Subsidiary or such other person as the Company may designate. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares and all applicable tax withholdings. This Option shall be deemed to be exercised upon receipt by the Subsidiary of such fully executed Exercise Notice accompanied by the aggregate Exercise Price and payment of all applicable tax withholdings.

No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise complies with Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to the Optionee on the date on which the Option is exercised with respect to such Shares.

3. Optionee's Representations. In the event the Shares have not been registered under the Securities Act of 1933, as amended, at the time this Option is exercised, the Optionee shall, if required by the Company, concurrently with the exercise of all or any portion of this Option, deliver

to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit C.

4. Lock-Up Period. Optionee hereby agrees that, if so requested by the Company or any representative of the underwriters (the "Managing Underwriter") in connection with any registration of the offering of any securities of the Company under the Securities Act, Optionee shall not sell or otherwise transfer any Shares or other securities of the Company during the 180-day period (or such other period as may be requested in writing by the Managing Underwriter and agreed to in writing by the Company) (the "Market Standoff Period") following the effective date of a registration statement of the Company filed under the Securities Act. The Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such Market Standoff Period and Optionee agrees to enter into a market stand-off agreement in customary form consistent with this section with the managing underwriter.

5. Method of Payment. Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of the Optionee:

(a) cash or check (denominated in U.S. Dollars);

(b) wire transfer (denominated in U.S. Dollars); or

(c) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan.

6. Restrictions on Exercise. This Option may not be exercised until such time as the Plan has been approved by the shareholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any Applicable Law.

7. Non-Transferability of Option. This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Optionee only by Optionee. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of the Optionee.

8. Term of Option. This Option may be exercised only within the term set out in the Notice of Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option.

9. Withholding and Responsibility for Tax Related Items. Optionee hereby acknowledges and agrees that the ultimate liability for any and all tax, social insurance and payroll tax withholding ("Tax-Related Items") is and remains, to the extent provided for by law, his or her responsibility and liability and that his or her employer, the Company and its Subsidiaries (a) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Option grant, including the grant, vesting or exercise of the Option and the subsequent sale of Shares

acquired pursuant to such exercise; and (b) do not commit to structure the terms of the grant or any aspect of the Option to reduce or eliminate his or her liability for Tax-Related Items.

Optionee agrees that prior to exercise of the Option or sale of the Share(s) acquired thereunder, he or she shall pay or make adequate arrangements satisfactory to the Company and/or his or her employer, as applicable, to satisfy all withholding obligations of the Company and/or his or her employer. Optionee acknowledges and agrees that the Company may refuse to honor the exercise of the Option and refuse to deliver Shares if such withholding amounts are not delivered at the time of exercise or related sale. In this regard, Optionee authorizes the Company and/or his or her employer (be it through the intermediary of the Broker or otherwise) to withhold all applicable Tax-Related Items legally payable by him or her from his or her wages or other cash compensation paid to him or her by the Company and/or his or her employer, or from proceeds of sale. Alternatively, or in addition, Optionee agrees and acknowledges that the Company may sell or arrange for the sale of Shares that Optionee is due to acquire with respect to the Option to meet the minimum withholding obligation for Tax Related Items. Any estimated withholding which is not required in satisfaction of any Tax Related Items shall be repaid to Optionee by the Company or his or her employer, as applicable. Finally, Optionee agrees that he or she shall pay to the Company or his or her employer, as applicable, any amount of any Tax Related Items that the Company and/or his or her employer may be required to withhold as a result of his or her participation in the Plan or his or her exercise of the Option or sale of Shares acquired thereunder that cannot be satisfied by the means previously described. In the event that the Options under the Plan are subsequently disqualified for purposes of French tax law, Optionee agrees to submit immediately the amount of any income tax withholding and/or Optionee's social security contributions due by means of check, cash or credit transfer. In addition, Optionee grants the Company or his/her employer the right to require the Broker to withhold sufficient amounts from the sale proceeds to meet the Tax Related Items withholding obligations.

Optionee's employer or the Company may withhold Shares owed to Optionee at the time of exercise in order to meet the tax and/or social insurance charges that might be due on behalf of Optionee at the time of sale of the underlying Shares. Upon sale of the underlying Shares, Optionee authorizes his/her employer or the Company to withhold, or request the Broker to withhold, from the proceeds to be paid to Optionee the amount necessary to satisfy the Tax Related Items due on behalf of Optionee at the time of exercise of the Option and/or sale of the Shares acquired thereunder. If such amounts are due and are not withheld, Optionee shall agree to submit the amount due to the Company, his or her employer or the appropriate tax authorities by check, cash or credit transfer upon request.

Optionee also agrees that in the hypothesis he/she breaches any obligation set forth in the Plan, or this Option Agreement, the damages that shall be suffered by his/her employer and/or the Company shall be no less than the amount of the taxes and social security contributions (employer's and Employee's part) applicable to the related Options or Shares acquired thereunder, which minimum amount shall therefore be withheld by his/her employer, the Company or the Broker as damages, notwithstanding any further action from his/her employer and or the Company against Optionee.

10. Acknowledgements.

(a) Optionee acknowledges receipt of a copy of the Plan (including any applicable appendixes thereunder) and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Optionee has reviewed the Plan (including any applicable appendixes thereunder) and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan (including any applicable appendixes thereunder) or this Option. Optionee further agrees to notify the Company upon any change in the residence address indicated below.

(b) The Company (and not Optionee's employer) is granting the Option. The Company will administer the Plan from outside Optionee's country of residence and that United States of America law will govern all Options granted under the Plan.

(c) That benefits and rights provided under the Plan are wholly discretionary and, although provided by the Company, do not constitute regular or periodic payments. The benefits and rights provided under the Plan are not to be considered part of Optionee's salary or compensation for purposes of calculating any severance, resignation, redundancy or other end of service payments, vacation, bonuses, long-term service awards, indemnification, pension or retirement benefits, or any other payments, benefits or rights of any kind. Optionee waives any and all rights to compensation or damages as a result of the termination of employment with the Company for any reason whatsoever insofar as those rights result or may result from:

(1) the loss or diminution in value of such rights under the Plan, or

(2) Optionee ceases to have any rights under, or ceases to be entitled to any rights under the Plan as a result of such termination.

(d) The grant of the Option, and any future grant of Options under the Plan is entirely voluntary, and at the complete discretion of the Company. Neither the grant of the Option nor any future grant of an Option by the Company will be deemed to create any obligation to grant any further Options, whether or not such a reservation is explicitly stated at the time of such a grant. The Company has the right, at any time to amend, suspend or terminate the Plan (including any applicable appendixes thereunder).

(e) The Plan will not be deemed to constitute, and will not be construed by Optionee to constitute, part of the terms and conditions of employment, and that the Company will not incur any liability of any kind to Optionee as a result of any change or amendment, or any cancellation, of the Plan at any time.

(f) Participation in the Plan will not be deemed to constitute, and will not be deemed by Optionee to constitute, an employment or labor relationship of any kind with the Company.

(g) By entering into this Option Agreement, and as a condition of the grant of the Option, Optionee consents to the collection, use, and transfer of personal data as described in this subsection to the full extent permitted by and in full compliance with Applicable Law.

(1) Optionee understands that the Company and its Subsidiaries hold certain personal information about the Optionee, including, but not limited to, name, home address and telephone number, date of birth, social insurance number, salary, nationality, job title, any Shares or directorships held in the Company, details of all Options or other entitlement to Shares awarded, canceled, exercised, vested, unvested, or outstanding in Optionee's favor, for the purpose of managing and administering the Plan ("Data").

(2) Optionee further understands that the Company and/or its Subsidiaries will transfer Data among themselves as necessary for the purposes of implementation, administration, and management of Optionee's participation in the Plan, and that the Company and/or its Subsidiary may each further transfer Data to any third parties assisting the Company in the implementation, administration, and management of the Plan ("Data Recipients").

(3) Optionee understands that these Data Recipients may be located in Optionee's country of residence or elsewhere, such as the United States. Optionee authorizes the Data Recipients to receive, possess, use, retain, and transfer Data in electronic or other form, for the purposes of implementing, administering, and managing Optionee's participation in the Plan, including any transfer of such Data, as may be required for the administration of the Plan and/or the subsequent holding of Shares on Optionee's behalf, to a broker or third party with whom the Shares acquired on exercise may be deposited.

(4) Optionee understands that Optionee may, at any time, review the Data, request that any necessary amendments be made to it, or withdraw Optionee's consent herein in writing by contacting the Company. Optionee further understands that withdrawing consent may affect Optionee's ability to participate in the Plan.

(h) Optionee has received the terms and conditions of this Option Agreement and any other related communications, and Optionee consents to having received these documents in English. **Je reconnais expressément par les présentes, que je comprends et parle parfaitement la langue anglaise, que j'ai eu le temps nécessaire pour entièrement lire et parfaitement comprendre le présent contrat ainsi que l'ensemble des documents et annexes s'y afférant et que j'ai eu l'opportunité de m'en entretenir avec les conseils de mon choix.** (*I represent that I perfectly speak and understand English language, that I had enough time to review and understand this agreement as all the related documents and appendix and that I had the opportunity to obtain advice from the counsels of my choice).*

11. Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely

to the Optionee's interest except by means of a writing signed by the Company and Optionee. This Option Agreement is governed by the internal substantive laws but not the choice of law rules of the State of California.

12. No Guarantee of Continued Service. OPTIONEE ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY OR THE PARENT OR SUBSIDIARY OF THE COMPANY EMPLOYING OR RETAINING OPTIONEE (NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER). OPTIONEE FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH OPTIONEE'S RIGHT OR THE RIGHT OF THE COMPANY (OR THE PARENT OR SUBSIDIARY OF THE COMPANY EMPLOYING OR RETAINING OPTIONEE) TO TERMINATE OPTIONEE'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

[Signature Page Follows]

Optionee acknowledges receipt of a copy of the Plan (including Appendix B attached thereto) and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Optionee has reviewed the Plan and this Option in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Optionee further agrees to notify the Company upon any change in the residence address indicated below.

OPTIONEE:

_____

Residence Address:

_____

_____

FLUIDIGM CORPORATION

By: _____

Title: _____

EXHIBIT A

1999 STOCK OPTION PLAN
EXERCISE NOTICE

Fluidigm Corporation
Attn: President
7000 Shoreline Court
Suite 100
South San Francisco, CA 94080

1. Exercise of Option. Effective as of today, _____, __, the undersigned ("Optionee") hereby elects to exercise Optionee's option (the "Option") to purchase _____ shares of the Common Stock (the "Shares") of Fluidigm Corporation (the "Company") under and pursuant to the 1999 Stock Option Plan, including any applicable appendixes thereunder (collectively, the "Plan"), and the Stock Option Agreement dated May 8, 2007 (the "Option Agreement").

2. Delivery of Payment. Optionee herewith delivers to the Company the full purchase price of the Shares, as set forth in the Option Agreement. Should any tax or social contribution be due by the Company (or Optionee's employer) due to the exercise of the Option or the disposition of the Shares, Optionee hereby agrees that the corresponding amount may be withheld on the proceeds due to Optionee from any sale of the Shares by the broker previously selected by the Company to be used by Optionee and such amount shall be directly paid to the Company so that the Company may pay the relevant taxing authorities any amounts due.

3. Representations of Optionee. Optionee acknowledges that Optionee has received, read and understood the Plan and the Option Agreement and agrees to abide by and be bound by their terms and conditions.

4. Rights as Shareholder. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a shareholder shall exist with respect to the optioned stock, notwithstanding the exercise of the Option. The Shares shall be issued to the Optionee as soon as practicable after the Option is exercised. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance except as provided in Section 11 of the Plan.

5. Company's Right of First Refusal. Before any Shares held by Optionee or any transferee (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section (the "Right of First Refusal").

(a) Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and

(iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares (the "Offered Price"), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

(b) Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection (c) below.

(c) Purchase Price. The purchase price ("Purchase Price") for the Shares purchased by the Company or its assignee(s) under this Section shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

(d) Payment. Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within 30 days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(e) Holder's Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section, then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, provided that such sale or other transfer is consummated within 120 days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(f) Exception for Certain Family Transfers. Anything to the contrary contained in this Section notwithstanding, the transfer of any or all of the Shares during the Optionee's lifetime or on the Optionee's death by will or intestacy to the Optionee's immediate family or a trust for the benefit of the Optionee's immediate family shall be exempt from the provisions of this Section. "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section, and there shall be no further transfer of such Shares except in accordance with the terms of this Section.

(g) Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act of 1933, as amended.

6. Tax Consultation. Optionee understands that Optionee may suffer adverse tax consequences as a result of Optionee's purchase or disposition of the Shares. Optionee represents that Optionee has consulted with any tax consultants Optionee deems advisable in connection with the purchase or disposition of the Shares and that Optionee is not relying on the Company for any tax advice.

7. Restrictive Legends and Stop-Transfer Orders.

(a) Legends. Optionee understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COMPANY COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND RIGHT OF FIRST REFUSAL OPTIONS HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE EXERCISE NOTICE BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE MAY NOT BE TRANSFERRED, ASSIGNED OR HYPOTHECATED IN ANY MANNER OTHER THAN BY WILL OR BY THE LAWS OF DESCENT OR DISTRIBUTION BEFORE THE DATE THREE (3) YEARS AFTER THE INITIAL EXERCISE DATE, AS SUCH TERM IS DEFINED IN THE STOCK OPTION AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER FOR A PERIOD NOT TO EXCEED 180 DAYS FOLLOWING THE EFFECTIVE

DATE OF UNDERWRITTEN PUBLIC OFFERING OF THE COMPANY'S SECURITIES AND MAY NOT BE SOLD OR OTHERWISE DISPOSED OF BY THE HOLDER WITHOUT THE CONSENT OF THE COMPANY OR THE MANAGING UNDERWRITER.

(b) Stop-Transfer Notices. Optionee agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Exercise Notice or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

8. Successors and Assigns. The Company may assign any of its rights under this Exercise Notice to single or multiple assignees, and the terms and conditions of this Exercise Notice shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, the terms and conditions of this Exercise Notice shall be binding upon Optionee and his or her heirs, executors, administrators, successors and assigns.

9. Interpretation. Any dispute regarding the interpretation of this Exercise Notice shall be submitted by Optionee or by the Company forthwith to the Administrator which shall review such dispute at its next regular meeting. The resolution of such a dispute by the Administrator shall be final and binding on all parties.

10. Governing Law; Severability. This Exercise Notice is governed by the internal substantive laws, but not the choice of law rules, of the State of California.

11. Entire Agreement. The Plan and Option Agreement are incorporated herein by reference. This Exercise Notice, the Plan, the Restricted Stock Purchase Agreement, the Option Agreement and the Investment Representation Statement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee.

Je reconnais expressément par les présentes, que je comprends et parle parfaitement la langue anglaise, que j'ai eu le temps nécessaire pour entièrement lire et parfaitement comprendre le présent contrat ainsi que l'ensemble des documents et annexes s'y afférant et que j'ai eu l'opportunité de m'en entretenir avec les conseils de mon choix. (*I represent that I perfectly speak and understand English language, that I had enough time to review and understand this agreement as all the related documents and appendix and that I had the opportunity to obtain advice from the counsels of my choice).*

Submitted by:

OPTIONEE:

_____

Address:

_____

_____

Accepted by:

FLUIDIGM CORPORATION

By: _____

Its: _____

Date Received: _____

EXHIBIT B

FLUIDIGM CORPORATION

1999 STOCK OPTION PLAN

ESCROW PROVISIONS – FRENCH EMPLOYEES

1. Option. As set forth in the Notice of Grant, you have been granted the Option under the Plan. The Shares acquired upon exercise of the Option shall be held by the Company under these Escrow Provisions in an account in your name.

2. Legal and Equitable Title. Legal and equitable title to the Option and any cash or securities acquired pursuant thereto, shall remain with you at all times, notwithstanding that such items may be held by the Company pursuant to these Escrow Instructions.

3. Exercise of Option. You may instruct the Company to exercise the Option on your behalf at such time or times as permitted by the Notice of Grant, the Stock Option Agreement and the Plan.

4. Proceeds of Exercise. Shares acquired upon exercise of the Option shall be retained in this Escrow until the date three (3) years from the Initial Exercise Date (the "Holding Period"); provided, however, that the duration of this restriction on sale shall be automatically adjusted to conform with any changes to the holding period required for favorable tax and social security treatment under Applicable Laws, as defined in the Plan. Upon the expiration of the Holding Period, you may elect to keep the Shares in your account under these Escrow Provisions or have them distributed to you as soon as administratively feasible. You may elect to keep any proceeds from any sale of such Shares, made following the expiration of the Holding Period, in your account under these Escrow Provisions or to have them distributed to you within ten (10) business days of the sale, pursuant to such channels as the Company reasonably determines appropriate.

5. Powers of Company. The Company may take any and all actions, and is hereby granted such powers and discretion, as may appear necessary or proper to comply with the Applicable Laws and to effectuate and carry out the terms and purposes of this Escrow, including, but not limited to, the power to exercise the Option and hold or dispose of the proceeds of such exercise in accordance with the terms of these Escrow Provisions.

6. Limitation of Liability. The Company shall not be liable for any damage caused by the exercise of its discretion as authorized by these Escrow Provisions for any reason, except gross negligence or willful misconduct. The Company shall not be liable for honest mistakes of judgment or for losses or liabilities due to such honest mistakes of judgment.

7. Costs and Expenses of this Escrow. All costs and expenses of these Escrow Provisions shall be borne by the Company.

8. Governing Law. This Escrow shall be administered in the State of California, and its validity, construction and all rights hereunder, shall be governed by the laws of the State of California; provided, however, that all matters affecting the title, ownership and transferability of any security, whether created or held hereunder, shall be governed by all applicable federal, state, or foreign securities laws.

OPTIONEE	FLUIDIGM CORPORATION
Signature	By
Print Name	Title
Residence Address	

EXHIBIT C

INVESTMENT REPRESENTATION STATEMENT

OPTIONEE	:	
COMPANY	:	FLUIDIGM CORPORATION
SECURITY	:	COMMON STOCK
AMOUNT	:	
DATE	:	

In connection with the purchase of the above-listed Securities, the undersigned Optionee represents to the Company the following:

(e) Optionee is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Optionee is acquiring these Securities for investment for Optionee's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(f) Optionee acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Optionee's investment intent as expressed herein. In this connection, Optionee understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Optionee's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one year or any other fixed period in the future. Optionee further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Optionee further acknowledges and understands that the Company is under no obligation to register the Securities. Optionee understands that the certificate evidencing the Securities will be imprinted with a legend which prohibits the transfer of the Securities unless they are registered or such registration is not required in the opinion of counsel satisfactory to the Company, and with any other legend required under applicable state securities laws.

(g) Optionee is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Option to the Optionee, the exercise will be exempt from registration under the Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701

may be resold, subject to the satisfaction of certain of the conditions specified by Rule 144, including: (1) the resale being made through a broker in an unsolicited "broker's transaction" or in transactions directly with a market maker (as said term is defined under the Securities Exchange Act of 1934); and, in the case of an affiliate, (2) the availability of certain public information about the Company, (3) the amount of Securities being sold during any three month period not exceeding the limitations specified in Rule 144(e), and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Option, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which requires the resale to occur not less than one year after the later of the date the Securities were sold by the Company or the date the Securities were sold by an affiliate of the Company, within the meaning of Rule 144; and, in the case of acquisition of the Securities by an affiliate, or by a non-affiliate who subsequently holds the Securities less than two years, the satisfaction of the conditions set forth in sections (1), (2), (3) and (4) of the paragraph immediately above.

(h) Optionee further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption will be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Optionee understands that no assurances can be given that any such other registration exemption will be available in such event.

Signature of Optionee:

_____

Date: _____, ____

UK SUB-PLAN OF THE

FLUIDIGM CORPORATION

1999 STOCK OPTION PLAN

UK STOCK OPTION AGREEMENT

Unless otherwise defined herein, the terms defined in the UK Sub-Plan of the 1999 Stock Option Plan (or the applicable appendix thereunder) shall have the same defined meanings in this Stock Option Agreement (the "Option Agreement").

This Option will be taxed in the UK as an unapproved securities option.

I. NOTICE OF STOCK OPTION GRANT

Name
Address

You have been granted an option to purchase Common Stock of the Company, subject to the terms and conditions of the Sub-Plan, the Joint Election (as defined in Section 9(b) below) and Section 431 Election (as defined in Section 9(c) below) and this Option Agreement, as follows:

Grant Number	
Date of Grant	
Vesting Commencement Date	
Exercise Price per Share	$
Total Number of Shares Granted	
Total Exercise Price	U.S.$
Type of Option:	Unapproved Option
Term/Expiration Date:	

Exercise and Vesting Schedule:

This Option shall be exercisable in whole or in part, and shall vest according to the following vesting schedule:

[Vesting Schedule]

Termination Period:

This Option may be exercised, to the extent it is then vested, for three months after Optionee ceases to be a Service Provider. Upon death or Disability of the Optionee, this Option may be exercised, to the extent it is then vested, for one year after Optionee ceases to be Service Provider. In no event shall this Option be exercised later than the Term/Expiration Date as provided above.

II. AGREEMENT

1. Grant of Option. The Administrator of the Company hereby grants to the Optionee named in the Notice of Grant (the "Optionee"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Grant, at the exercise price per Share set forth in the Notice of Grant (the "Exercise Price"), and subject to the terms and conditions of the Sub-Plan, which is incorporated herein by reference. Subject to Section 13(c) of the Sub-Plan, in the event of a conflict between the terms and conditions of the Sub-Plan and this Option Agreement, the terms and conditions of the Sub-Plan shall prevail.

2. Exercise of Option. This Option shall be exercisable during its term in accordance with the provisions of Section 9 of the Sub-Plan as follows:

(a) Right to Exercise. This Option shall be exercisable during its term in accordance with the Vesting Schedule set out in the Notice of Grant and with the applicable provisions of the Sub-Plan and this Option Agreement.

(b) Method of Exercise. This Option shall be exercisable by delivery of an exercise notice in the form attached as Exhibit A (the "Exercise Notice") which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised, and is accompanied by a Joint Election, a Section 431 Election and such other representations and agreements as may be required by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares, the Option Tax Liability (as defined in Section 9 (e) below) and the Secondary NIC Liability (as defined in section 9(d)). This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice and such elections and other documents as required by the Company and accompanied by the aggregate Exercise Price, the Option Tax Liability and the Secondary NIC Liability.

No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise complies with Applicable Laws.

3. Optionee's Representations. In the event the Shares have not been registered under the Securities Act of 1933, as amended, at the time this Option is exercised, the Optionee shall, if required by the Company, concurrently with the exercise of all or any portion of this Option, deliver to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit B.

4. Lock-Up Period. Optionee hereby agrees that, if so requested by the Company or any representative of the underwriters (the "Managing Underwriter") in connection with any registration of the offering of any securities of the Company under the Securities Act, Optionee shall not sell or otherwise transfer any Shares or other securities of the Company during the 180-day period (or such other period as may be requested in writing by the Managing Underwriter and agreed to in writing by the Company) (the "Market Standoff Period") following the effective date of a registration statement of the Company filed under the Securities Act. The Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such Market Standoff Period and Optionee agrees to enter into a market stand-off agreement in customary form consistent with this section with the managing underwriter.

5. Method of Payment. Payment of the aggregate Exercise Price together with payment of the Option Tax Liability and the Secondary NIC Liability shall be by any of the following, or a combination thereof, at the election of the Optionee:

(a) cash;

(b) cheque;

(c) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Sub-Plan.

6. Restrictions on Exercise. This Option may not be exercised until such time as the Plan has been approved by the shareholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any Applicable Law.

7. Non-Transferability of Option. This Option may not be transferred in any manner during Optionee's lifetime and may be exercised during the lifetime of Optionee only by Optionee. The terms of the Sub-Plan and this Option Agreement shall be binding upon the personal representatives of the Optionee.

8. Term of Option. This Option may be exercised only within the term set out in the Notice of Grant, and may be exercised during such term only in accordance with the Sub-Plan and the terms of this Option.

9. Tax Obligations.

(a) Withholding. Optionee agrees to make appropriate arrangements with the Company (or the Parent or Subsidiary employing or retaining Optionee) for the satisfaction of all Federal, state, local and foreign income and employment tax withholding requirements as well as social security charges applicable to the vesting of the Option, the exercise of the Option or the disposition of any Shares acquired upon exercise. In this regard, Optionee authorizes the Company (and/or the Parent or Subsidiary employing or retaining Optionee) to withhold all applicable taxes legally payable by Optionee from the Optionee's wages or other cash compensation paid to Optionee

by the Company (and/or the Parent or Subsidiary employing or retaining Optionee) or from proceeds from the sale of Shares acquired upon exercise of the Option in an amount sufficient to cover such tax obligations. Optionee acknowledges and agrees that the Company may refuse to honor the exercise and refuse to deliver Shares if such withholding amounts are not delivered at the time of exercise.

(b) Tax Consultation. Optionee understands that he or she may suffer adverse tax consequences as a result of Optionee's purchase or disposition of the Shares. Optionee represents that he or she will consult with any tax advisors Optionee deems appropriate in connection with the purchase or disposition of the Shares and that Optionee is not relying on the Company for any tax advice.

(c) Section 431 Election. As a further condition of the exercise of his Option, the Optionee shall have signed a Section 431 election under Section 431 Income Tax (Earnings and Pensions) Act 2003 in the form set out in Exhibit C or in such other form as may be determined by HM Revenue & Customs from time to time ("Section 431 Election").

(d) Employer's National Insurance Charges. As a futher condition of the exercise of an Option under the Sub-Plan the Optionee shall join with the Company, or if and to the extent that there is a change in the law, any other company or person who is or becomes a secondary contributor for NIC purposes in respect of this Option (the "Secondary Contributor") in making an election (in such terms and such form as provided in paragraphs 3A and 3B of Schedule 1 to the Social Security Contributions and Benefits Act 1992) which has been approved by HM Revenue & Customs (the "Joint Election"), for the transfer of the whole or any liability of the Secondary Contributor to Employer's Class 1 NICs ("Secondary NIC Liability").

(e) Optionee's Tax Indemnity.

(i) Indemnity To the extent permitted by law, the Optionee hereby agrees to indemnify and keep indemnified the Company, and the Company as trustee for and on behalf of any related corporation, in respect of any liability or obligation of the Company and/or any related corporation to account for income tax (under PAYE) or any other taxation provisions and primary class 1 national insurance contributions in the United Kingdom (the "Option Tax Liability") to the extent arising from the grant, exercise, assignment, release, cancellation or any other disposal of an Option or arising out of the acquisition, retention and disposal of the Shares acquired pursuant to this Option.

(ii) No Obligation to Issue Shares. The Company shall not be obliged to allot and issue any Shares or any interest in Shares pursuant to the exercise of this option unless and until the Optionee has paid to the Company such sum as is, in the opinion of the Company, sufficient to indemnify the Company in full against the Option Tax Liability and the Secondary NIC Liability, or the Optionee has made such other arrangement as in the opinion of the Company will ensure that the full amount of any Option Tax Liability and any Secondary NIC Liability will be recovered from the Optionee within such period as the Company may then determine.

(iii) Right of Retention. In the absence of any such other arrangement being made, the Company shall have the right to retain out of the aggregate number of shares to which the Optionee would have otherwise been entitled upon the exercise of this option, such number of Shares as, in the opinion of the Company, will enable the Company to sell as agent for the Optionee (at the best price which can reasonably expect to be obtained at the time of the sale) and to pay over to the Company sufficient monies out of the net proceeds of sale, after deduction of all fees, commissions and expenses incurred in relation to such sale, to satisfy the Optionee's liability under such indemnity.

10. Acknowledgements.

(a) Optionee acknowledges receipt of a copy of the Sub-Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Optionee has reviewed the Sub-Plan and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Sub-Plan or this Option. Optionee further agrees to notify the Company upon any change in the residence address indicated below.

(b) The Company (and not Optionee's employer) is granting the Option. The Company will administer the Sub-Plan from outside Optionee's country of residence and that United States of America law will govern all Options granted under the Sub-Plan.

(c) That benefits and rights provided under the Sub-Plan are wholly discretionary and, although provided by the Company, do not constitute regular or periodic payments. The benefits and rights provided under the Sub-Plan are not to be considered part of Optionee's salary or compensation for purposes of calculating any severance, resignation, redundancy or other end of service payments, vacation, bonuses, long-term service awards, indemnification, pension or retirement benefits, or any other payments, benefits or rights of any kind. Optionee waives any and all rights to compensation or damages as a result of the termination of employment with the Company for any reason whatsoever insofar as those rights result or may result from:

(i) the loss or diminution in value of such rights under the Sub-Plan, or

(ii) Optionee ceases to have any rights under, or ceases to be entitled to any rights under the Sub-Plan as a result of such termination.

(d) The grant of the Option, and any future grant of Options under the Sub-Plan is entirely voluntary, and at the complete discretion of the Company. Neither the grant of the Option nor any future grant of an Option by the Company will be deemed to create any obligation to grant any further Options, whether or not such a reservation is explicitly stated at the time of such a grant. The Company has the right, at any time to amend, suspend or terminate the Sub-Plan.

(e) The Sub-Plan will not be deemed to constitute, and will not be construed by Optionee to constitute, part of the terms and conditions of employment, and that the Company will not incur any liability of any kind to Optionee as a result of any change or amendment, or any cancellation, of the Sub-Plan at any time.

(f) Participation in the Sub-Plan will not be deemed to constitute, and will not be deemed by Optionee to constitute, an employment or labor relationship of any kind with the Company.

(g) By entering into this Option Agreement, and as a condition of the grant of the Option, Optionee consents to the collection, use, and transfer of personal data as described in this subsection to the full extent permitted by and in full compliance with Applicable Law.

(i) Optionee understands that the Company and its Subsidiaries hold certain personal information about the Optionee, including, but not limited to, name, home address and telephone number, date of birth, social insurance number, salary, nationality, job title, any Shares or directorships held in the Company, details of all Options or other entitlement to Shares awarded, canceled, exercised, vested, unvested, or outstanding in Optionee's favor, for the purpose of managing and administering the Sub-Plan ("Data").

(ii) Optionee further understands that the Company and/or its Subsidiaries will transfer Data among themselves as necessary for the purposes of implementation, administration, and management of Optionee's participation in the Sub-Plan, and that the Company and/or its Subsidiary may each further transfer Data to any third parties assisting the Company in the implementation, administration, and management of the Sub-Plan ("Data Recipients").

(iii) Optionee understands that these Data Recipients may be located in Optionee's country of residence or elsewhere, such as the United States. Optionee authorizes the Data Recipients to receive, possess, use, retain, and transfer Data in electronic or other form, for the purposes of implementing, administering, and managing Optionee's participation in the Sub-Plan, including any transfer of such Data, as may be required for the administration of the Sub-Plan and/or the subsequent holding of Shares on Optionee's behalf, to a broker or third party with whom the Shares acquired on exercise may be deposited. Where the transfer is to be to a destination outside the European Economic Area, the Company shall take reasonable steps to ensure that the Optionee's personal data continues to be adequately protected and securely held. The Optionee understands that the Optionee may, at any time, view the Optionee's personal data, require any necessary corrections to it or withdraw the consents herein in writing by contacting the Human Resources Department of the Company (but the Optionee acknowledges that without the use of such data it may not be practicable for the Company to administer the Optionee's involvement in the Sub-Plan in a timely fashion or at all and this may be detrimental to the Optionee).

(iv) Optionee understands that Optionee may, at any time, review the Data, request that any necessary amendments be made to it, or withdraw Optionee's consent herein in

writing by contacting the Company. Optionee further understands that withdrawing consent may affect Optionee's ability to participate in the Sub-Plan.

(h) Optionee has received the terms and conditions of this Option Agreement and any other related communications, and Optionee consents to having received these documents in English.

11. Entire Agreement; Governing Law. The Sub-Plan is incorporated herein by reference. The Sub-Plan, Joint Election, Section 341 Election and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee. This Option Agreement is governed by the internal substantive laws but not the choice of law rules of the State of California.

12. No Guarantee of Continued Service. OPTIONEE ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER OF THE COMPANY (NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER). OPTIONEE FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED EMPLOYMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH OPTIONEE'S RIGHT OR THE COMPANY'S RIGHT TO TERMINATE OPTIONEE'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

Optionee acknowledges receipt of a copy of the Sub-Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Optionee has reviewed the Sub-Plan, Joint Election, Section 431 Election and this Option in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Sub-Plan or this Option. Optionee further agrees to notify the Company upon any change in the residence address indicated below.

OPTIONEE:

_____

Residence Address:

FLUIDIGM CORPORATION

By: _____

Title: _____

EXHIBIT A

UK SUB-PLAN OF THE

FLUIDIGM CORPORATION

1999 STOCK OPTION PLAN

EXERCISE NOTICE

Fluidigm Corporation
Attn: President
7100 Shoreline Court
South San Francisco, CA 94080

1. Exercise of Option. Effective as of today, _____, _____, the undersigned ("Optionee") hereby elects to exercise Optionee's option (the "Option") to purchase _____ shares of the Common Stock (the "Shares") of Fluidigm Corporation (the "Company") under and pursuant to the UK Sub-Plan of the 1999 Stock Option Plan (the "Sub-Plan"), Joint Election and Section 431 Election and the Stock Option Agreement dated «GrantDate» (the "Option Agreement").

2. Delivery of Payment. Optionee herewith delivers to the Company the full purchase price of the Shares, as set forth in the Option Agreement, together with payment of the Option Tax Liability and the Secondary NIC Liability and any other withholding taxes due in connection with the exercise of the Option.

3. Representations of Optionee. Optionee acknowledges that Optionee has received, read and understood the Sub-Plan, Joint Election, Section 431 Election and the Option Agreement and agrees to abide by and be bound by their terms and conditions.

4. Rights as Shareholder. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a shareholder shall exist with respect to the optioned stock, notwithstanding the exercise of the Option. The Shares shall be issued to the Optionee as soon as practicable after the Option is exercised. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance except as provided in Section 11 of the Sub-Plan.

5. Company's Right of First Refusal. Before any Shares held by Optionee or any transferee (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section (the "Right of First Refusal").

(a) Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares (the "Offered Price"), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

(b) Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection (c) below.

(c) Purchase Price. The purchase price ("Purchase Price") for the Shares purchased by the Company or its assignee(s) under this Section shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

(d) Payment. Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by cheque), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within 30 days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(e) Holder's Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section, then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, provided that such sale or other transfer is consummated within 120 days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(f) Exception for Certain Family Transfers. Anything to the contrary contained in this Section notwithstanding, the transfer of any or all of the Shares during the Optionee's lifetime or on the Optionee's death by will or intestacy to the Optionee's immediate family or a trust for the benefit of the Optionee's immediate family shall be exempt from the provisions of this Section. "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the

Shares so transferred subject to the provisions of this Section, and there shall be no further transfer of such Shares except in accordance with the terms of this Section.

(g) Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act of 1933, as amended.

6. Tax Consultation. Optionee understands that Optionee may suffer adverse tax consequences as a result of Optionee's purchase or disposition of the Shares. Optionee represents that Optionee has consulted with any tax consultants Optionee deems advisable in connection with the purchase or disposition of the Shares and that Optionee is not relying on the Company for any tax advice.

7. Restrictive Legends and Stop-Transfer Orders.

(a) Legends. Optionee understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

> THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COMPANY COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.
>
> THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND RIGHT OF FIRST REFUSAL OPTIONS HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE EXERCISE NOTICE BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL ARE BINDING ON TRANSFEREES OF THESE SHARES.
>
> THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER FOR A PERIOD NOT TO EXCEED 180 DAYS FOLLOWING THE EFFECTIVE

DATE OF UNDERWRITTEN PUBLIC OFFERING OF THE COMPANY'S SECURITIES AND MAY NOT BE SOLD OR OTHERWISE DISPOSED OF BY THE HOLDER WITHOUT THE CONSENT OF THE COMPANY OR THE MANAGING UNDERWRITER.

(b) Stop-Transfer Notices. Optionee agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Exercise Notice or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

8. Successors and Assigns. The Company may assign any of its rights under this Exercise Notice to single or multiple assignees, and the terms and conditions of this Exercise Notice shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, the terms and conditions of this Exercise Notice shall be binding upon Optionee and his or her personal representatives.

9. Interpretation. Any dispute regarding the interpretation of this Exercise Notice shall be submitted by Optionee or by the Company forthwith to the Administrator which shall review such dispute at its next regular meeting. The resolution of such a dispute by the Administrator shall be final and binding on all parties.

10. Governing Law; Severability. This Exercise Notice is governed by the internal substantive laws, but not the choice of law rules, of the State of California.

11. Entire Agreement. The Sub-Plan, Joint Election, Section 431 Election and Option Agreement are incorporated herein by reference. This Exercise Notice, the Joint Election, the Section 431 Election, the Sub-Plan, the Restricted Stock Purchase Agreement, the Option Agreement and the Investment Representation Statement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee.

Submitted by:	Accepted by:
OPTIONEE:	FLUIDIGM CORPORATION
_____	By: _____

Its: _____

Address: Date Received: _____

_____

_____

_____

EXHIBIT B

INVESTMENT REPRESENTATION STATEMENT

OPTIONEE	:	
COMPANY	:	FLUIDIGM CORPORATION
SECURITY	:	COMMON STOCK
AMOUNT	:	
DATE	:	

In connection with the purchase of the above-listed Securities, the undersigned Optionee represents to the Company the following:

(a) Optionee is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Optionee is acquiring these Securities for investment for Optionee's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Optionee acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Optionee's investment intent as expressed herein. In this connection, Optionee understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Optionee's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one year or any other fixed period in the future. Optionee further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Optionee further acknowledges and understands that the Company is under no obligation to register the Securities. Optionee understands that the certificate evidencing the Securities will be imprinted with a legend which prohibits the transfer of the Securities unless they are registered or such registration is not required in the opinion of counsel satisfactory to the Company, and with any other legend required under applicable state securities laws.

(c) Optionee is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Option to the Optionee, the exercise will be exempt from registration under the Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701

may be resold, subject to the satisfaction of certain of the conditions specified by Rule 144, including: (1) the resale being made through a broker in an unsolicited "broker's transaction" or in transactions directly with a market maker (as said term is defined under the Securities Exchange Act of 1934); and, in the case of an affiliate, (2) the availability of certain public information about the Company, (3) the amount of Securities being sold during any three month period not exceeding the limitations specified in Rule 144(e), and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Option, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which requires the resale to occur not less than one year after the later of the date the Securities were sold by the Company or the date the Securities were sold by an affiliate of the Company, within the meaning of Rule 144; and, in the case of acquisition of the Securities by an affiliate, or by a non-affiliate who subsequently holds the Securities less than two years, the satisfaction of the conditions set forth in sections (1), (2), (3) and (4) of the paragraph immediately above.

(d) Optionee further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption will be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Optionee understands that no assurances can be given that any such other registration exemption will be available in such event.

Signature of Optionee:

_____

Date:_____, ____

EXHIBIT C

Joint Election under s431 ITEPA 2003 for full or partial disapplication of Chapter 2 Income Tax (Earnings and Pensions) Act 2003

One Part Election

1. **Between**

the Employee
whose National Insurance Number is _____
and
the Company (who is the Employee's employer) Fluidigm Europe, BV
of Company Registration Number _____

2. **Purpose of Election**

This joint election is made pursuant to section 431(1) or 431(2) Income Tax (Earnings and Pensions) Act 2003 (ITEPA) and applies where employment-related securities, which are restricted securities by reason of section 423 ITEPA, are acquired.

The effect of an election under section 431(1) is that, for the relevant Income Tax and NIC purposes, the employment-related securities and their market value will be treated as if they were not restricted securities and that sections 425 to 430 ITEPA do not apply. An election under section 431(2) will ignore one or more of the restrictions in computing the charge on acquisition. Additional Income Tax will be payable (with PAYE and NIC where the securities are Readily Convertible Assets).

Should the value of the securities fall following the acquisition, it is possible that Income Tax/NIC that would have arisen because of any future chargeable event (in the absence of an election) would have been less than the Income Tax/NIC due by reason of this election. Should this be the case, there is no Income Tax/NIC relief available under Part 7 of ITEPA 2003; nor is it available if the securities acquired are subsequently transferred, forfeited or revert to the original owner.

3. **Application**

This joint election is made not later than 14 days after the date of acquisition of the securities by the employee and applies to:

Number of securities _____
Description of securities Common Stock of Fluidigm Corporation.
Name of issuer of securities Fluidigm Corporation.
To be acquired by the Employee after ____, _____ *20*____ [*dd/mm/yyyy*] under the terms of the UK Sub-Plan of the Fluidigm Corporation 1999 Stock Option Plan.

4. **Extent of Application**

This election disapplies section 431(1) ITEPA: all restrictions attaching to the securities.

5. **Declaration**

This election will become irrevocable upon the later of its signing or the acquisition (* and each subsequent acquisition) of employment-related securities to which this election applies.

(delete as appropriate)*

In signing this joint election, we agree to be bound by its terms as stated above.

....//...../.....
Signature(Employee) Date

....//...../.....
Signature (for and on behalf of the Company) Date

.....
Position in company

Note: Where the election is in respect of multiple acquisitions, prior to the date of any subsequent acquisition of a security it may be revoked by agreement between the employee and employer in respect of that and any later acquisition.

Exhibit 10.3

FLUIDIGM CORPORATION

2009 EQUITY INCENTIVE PLAN

(As adopted on April 30, 2009, as amended on November 10, 2009)

1. Purposes of the Plan. The purposes of this Plan are:

— to attract and retain the best available personnel for positions of substantial responsibility,

— to provide additional incentive to Employees, Directors and Consultants, and

— to promote the success of the Company's business.

The Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock and Restricted Stock Units.

2. Definitions. As used herein, the following definitions will apply:

(a) "Administrator" means the Board or any of its Committees as will be administering the Plan, in accordance with Section 4 of the Plan.

(b) "Applicable Laws" means the requirements relating to the administration of equity-based awards under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan.

(c) "Award" means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, or Restricted Stock Units.

(d) "Award Agreement" means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.

(e) "Board" means the Board of Directors of the Company.

(f) "Change in Control" means the occurrence of any of the following events:

(i) Change in Ownership of the Company. A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than fifty percent (50%) of the total voting power of the stock of the Company, except that any change in the ownership of the stock of the Company as a result of a private financing of the Company that is approved by the Board will not be considered a Change in

Control. For purposes of this clause (i), if any Person is considered to own fifty percent (50%) of the total voting power of the stock of the Company, the acquisition of additional stock of the Company by the same Person will not be considered a Change in Control; or

(ii) Change in Effective Control of the Company. If the Company has a class of securities registered pursuant to Section 12 of the Exchange Act, a change in the effective control of the Company which occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this clause (ii), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(iii) Change in Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this Section 2(f), persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Code Section 409A, as it has been and may be amended from time to time, and any proposed or final Treasury Regulations and Internal Revenue Service guidance that has been promulgated or may be promulgated thereunder from time to time.

Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (i) its sole purpose is to change the state of the Company's incorporation, or (ii) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

(g) "Code" means the Internal Revenue Code of 1986, as amended. Any reference to a section of the Code herein will be a reference to any successor or amended section of the Code.

(h) "Committee" means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board, or by the compensation committee of the Board, in accordance with Section 4 hereof.

(i) "Common Stock" means the common stock of the Company.

(j) "Company" means Fluidigm Corporation, a Delaware corporation, or any successor thereto.

(k) "Consultant" means any individual, including an advisor, engaged by the Company or a Parent or Subsidiary to render services to such entity. For the avoidance of doubt, the term "Consultant" shall not include any entity or any non-natural person.

(l) "Director" means a member of the Board.

(m) "Disability" means total and permanent disability as defined in Code Section 22(e)(3), provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time.

(n) "Employee" means any person, including officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. Neither service as a Director nor payment of a director's fee by the Company will be sufficient to constitute "employment" by the Company.

(o) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(p) "Exchange Program" means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for Awards of the same type (which may have higher or lower exercise prices and different terms), Awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Administrator, and/or (iii) the exercise price of an outstanding Award is reduced or increased. The Administrator will determine the terms and conditions of any Exchange Program in its sole discretion.

(q) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market of The Nasdaq Stock Market, its Fair Market Value will be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share will be the mean between the high bid and low asked prices for the Common Stock on the day of determination (or, if no bids and asks were reported on that date, as applicable, on the last trading date such bids and asks were reported), as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.

(r) "Incentive Stock Option" means an Option that by its terms qualifies and is otherwise intended to qualify as an incentive stock option within the meaning of Code Section 422 and the regulations promulgated thereunder.

(s) "Nonstatutory Stock Option" means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.

(t) "Option" means a stock option granted pursuant to the Plan.

(u) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Code Section 424(e).

(v) "Participant" means the holder of an outstanding Award.

(w) "Period of Restriction" means the period during which the transfer of Shares of Restricted Stock are subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.

(x) "Plan" means this 2009 Equity Incentive Plan.

(y) "Restricted Stock" means Shares issued pursuant to an Award of Restricted Stock under Section 8 of the Plan, or issued pursuant to the early exercise of an Option.

(z) "Restricted Stock Unit" means a bookkeeping entry representing an amount equal to the Fair Market Value of one Share, granted pursuant to Section 9. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.

(aa) "Service Provider" means an Employee, Director or Consultant.

(bb) "Share" means a share of the Common Stock, as adjusted in accordance with Section 13 of the Plan.

(cc) "Stock Appreciation Right" means an Award, granted alone or in connection with an Option, that pursuant to Section 7 is designated as a Stock Appreciation Right.

(dd) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Code Section 424(f).

3. Stock Subject to the Plan.

(a) Stock Subject to the Plan. Subject to the provisions of Section 13 of the Plan, the maximum aggregate number of Shares that may be subject to Awards and sold under the Plan is 1,746,478 Shares, plus any Shares subject to stock options or similar awards granted under the Fluidigm Corporation 1999 Stock Option Plan (the "1999 Plan") that expire or otherwise terminate

without having been exercised in full and Shares issued pursuant to awards granted under the 1999 Plan that are forfeited to or repurchased by the Company, with the maximum number of Shares to be added to the Plan equal to 2,161,997 Shares. The Shares may be authorized but unissued, or reacquired Common Stock.

(b) Lapsed Awards. If an Award expires or becomes unexercisable without having been exercised in full, is surrendered pursuant to an Exchange Program, or, with respect to Restricted Stock or Restricted Stock Units, is forfeited to or repurchased by the Company due to the failure to vest, the unpurchased Shares (or for Awards other than Options or Stock Appreciation Rights the forfeited or repurchased Shares) which were subject thereto will become available for future grant or sale under the Plan (unless the Plan has terminated). With respect to Stock Appreciation Rights, only Shares actually issued pursuant to a Stock Appreciation Right will cease to be available under the Plan; all remaining Shares under Stock Appreciation Rights will remain available for future grant or sale under the Plan (unless the Plan has terminated). Shares that have actually been issued under the Plan under any Award will not be returned to the Plan and will not become available for future distribution under the Plan; provided, however, that if Shares issued pursuant to Awards of Restricted Stock or Restricted Stock Units are repurchased by the Company or are forfeited to the Company due to the failure to vest, such Shares will become available for future grant under the Plan. Shares used to pay the exercise price of an Award or to satisfy the tax withholding obligations related to an Award will become available for future grant or sale under the Plan. To the extent an Award under the Plan is paid out in cash rather than Shares, such cash payment will not result in reducing the number of Shares available for issuance under the Plan. Notwithstanding the foregoing and, subject to adjustment as provided in Section 13, the maximum number of Shares that may be issued upon the exercise of Incentive Stock Options will equal the aggregate Share number stated in Section 3(a), plus, to the extent allowable under Code Section 422 and the Treasury Regulations promulgated thereunder, any Shares that become available for issuance under the Plan pursuant to Section 3(b).

(c) Share Reserve. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

4. Administration of the Plan.

(a) Procedure.

(i) Multiple Administrative Bodies. Different Committees with respect to different groups of Service Providers may administer the Plan.

(ii) Other Administration. Other than as provided above, the Plan will be administered by (A) the Board or (B) a Committee, which Committee will be constituted to satisfy Applicable Laws.

(b) Powers of the Administrator. Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator will have the authority, in its discretion:

(i) to determine the Fair Market Value;

(ii) to select the Service Providers to whom Awards may be granted hereunder;

(iii) to determine the number of Shares to be covered by each Award granted hereunder;

(iv) to approve forms of Award Agreements for use under the Plan;

(v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator will determine;

(vi) to institute and determine the terms and conditions of an Exchange Program;

(vii) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;

(viii) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws or for qualifying for favorable tax treatment under applicable foreign laws;

(ix) to modify or amend each Award (subject to Section 18(c) of the Plan), including but not limited to the discretionary authority to extend the post-termination exercisability period of Awards and to extend the maximum term of an Option (subject to Section 6(d));

(x) to allow Participants to satisfy withholding tax obligations in a manner prescribed in Section 14;

(xi) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;

(xii) to allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that otherwise would be due to such Participant under an Award; and

(xiii) to make all other determinations deemed necessary or advisable for administering the Plan.

(c) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards.

5. Eligibility. Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, and Restricted Stock Units may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

6. Stock Options.

(a) Grant of Options. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Options in such amounts as the Administrator, in its sole discretion, will determine.

(b) Option Agreement. Each Award of an Option will be evidenced by an Award Agreement that will specify the exercise price, the term of the Option, the number of Shares subject to the Option, the exercise restrictions, if any, applicable to the Option, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(c) Limitations. Each Option will be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. Notwithstanding such designation, however, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Participant during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds one hundred thousand dollars ($100,000), such Options will be treated as Nonstatutory Stock Options. For purposes of this Section 6(c), Incentive Stock Options will be taken into account in the order in which they were granted, the Fair Market Value of the Shares will be determined as of the time the Option with respect to such Shares is granted, and calculation will be performed in accordance with Code Section 422 and Treasury Regulations promulgated thereunder.

(d) Term of Option. The term of each Option will be stated in the Award Agreement; provided, however, that the term will be no more than ten (10) years from the date of grant thereof. In the case of an Incentive Stock Option granted to a Participant who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option will be five (5) years from the date of grant or such shorter term as may be provided in the Award Agreement.

(e) Option Exercise Price and Consideration.

(i) Exercise Price. The per Share exercise price for the Shares to be issued pursuant to the exercise of an Option will be determined by the Administrator, but will be no less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant. In addition, in the case of an Incentive Stock Option granted to an Employee who owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price will be no less than one hundred ten percent (110%) of the Fair Market Value per Share on the date of grant. Notwithstanding the foregoing provisions of this Section 6(e)(i), Options may be granted with a per Share exercise price of less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Code Section 424(a).

(ii) Waiting Period and Exercise Dates. At the time an Option is granted, the Administrator will fix the period within which the Option may be exercised and will determine any conditions that must be satisfied before the Option may be exercised.

(iii) Form of Consideration. The Administrator will determine the acceptable form of consideration for exercising an Option, including the method of payment. In the case of an Incentive Stock Option, the Administrator will determine the acceptable form of consideration at the time of grant. Such consideration may consist entirely of: (1) cash; (2) check; (3) promissory note, to the extent permitted by Applicable Laws, (4) other Shares, provided that such Shares have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which such Option will be exercised and provided further that accepting such Shares will not result in any adverse accounting consequences to the Company, as the Administrator determines in its sole discretion; (5) consideration received by the Company under cashless exercise program (whether through a broker or otherwise) implemented by the Company in connection with the Plan; (6) by net exercise, (7) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws, or (8) any combination of the foregoing methods of payment. In making its determination as to the type of consideration to accept, the Administrator will consider if acceptance of such consideration may be reasonably expected to benefit the Company.

(f) Exercise of Option.

(i) Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder will be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. An Option may not be exercised for a fraction of a Share.

An Option will be deemed exercised when the Company receives: (i) notice of exercise (in such form as the Administrator may specify from time to time) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised (together with applicable tax withholding). Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan. Shares issued upon exercise of an Option will be issued in the name of the Participant or, if requested by the Participant, in the name of the Participant and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares subject to an Option, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 13 of the Plan.

Exercising an Option in any manner will decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(ii) Termination of Relationship as a Service Provider. If a Participant ceases to be a Service Provider, other than upon the Participant's termination as the result of the Participant's death or Disability, the Participant may exercise his or her Option within thirty (30) days of termination, or such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement) to the extent that the Option is vested on the date of termination. Unless otherwise provided by the

Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified by the Administrator, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iii) Disability of Participant. If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within six (6) months of termination, or such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement) to the extent the Option is vested on the date of termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iv) Death of Participant. If a Participant dies while a Service Provider, the Option may be exercised within six (6) months following the Participant's death, or within such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement) to the extent that the Option is vested on the date of death, by the Participant's designated beneficiary, provided such beneficiary has been designated prior to the Participant's death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. Unless otherwise provided by the Administrator, if at the time of death Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will immediately revert to the Plan. If the Option is not so exercised within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

7. Stock Appreciation Rights.

(a) Grant of Stock Appreciation Rights. Subject to the terms and conditions of the Plan, a Stock Appreciation Right may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion.

(b) Number of Shares. The Administrator will have complete discretion to determine the number of Shares subject to any Award of Stock Appreciation Rights.

(c) Exercise Price and Other Terms. The per Share exercise price for the Shares that will determine the amount of the payment to be received upon exercise of a Stock Appreciation Right as set forth in Section 7(f) will be determined by the Administrator and will be no less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant. Otherwise, the Administrator, subject to the provisions of the Plan, will have complete discretion to determine the terms and conditions of Stock Appreciation Rights granted under the Plan.

(d) Stock Appreciation Right Agreement. Each Stock Appreciation Right grant will be evidenced by an Award Agreement that will specify the exercise price, the term of the Stock Appreciation Right, the conditions of exercise, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(e) Expiration of Stock Appreciation Rights. A Stock Appreciation Right granted under the Plan will expire upon the date determined by the Administrator, in its sole discretion, and set forth in the Award Agreement. Notwithstanding the foregoing, the rules of Section 6(d) relating to the maximum term and Section 6(f) relating to exercise also will apply to Stock Appreciation Rights.

(f) Payment of Stock Appreciation Right Amount. Upon exercise of a Stock Appreciation Right, a Participant will be entitled to receive payment from the Company in an amount determined by multiplying:

(i) The difference between the Fair Market Value of a Share on the date of exercise over the exercise price; times

(ii) The number of Shares with respect to which the Stock Appreciation Right is exercised.

At the discretion of the Administrator, the payment upon Stock Appreciation Right exercise may be in cash, in Shares of equivalent value, or in some combination thereof.

8. Restricted Stock.

(a) Grant of Restricted Stock. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator, in its sole discretion, will determine.

(b) Restricted Stock Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify the Period of Restriction, the number of Shares granted, and such other terms and conditions as the Administrator, in its sole discretion, will determine. Unless the Administrator determines otherwise, the Company as escrow agent will hold Shares of Restricted Stock until the restrictions on such Shares have lapsed.

(c) Transferability. Except as provided in this Section 8 or as the Administrator determines, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable Period of Restriction.

(d) Other Restrictions. The Administrator, in its sole discretion, may impose such other restrictions on Shares of Restricted Stock as it may deem advisable or appropriate.

(e) Removal of Restrictions. Except as otherwise provided in this Section 8, Shares of Restricted Stock covered by each Restricted Stock grant made under the Plan will be released from escrow as soon as practicable after the last day of the Period of Restriction or at such other time as the Administrator may determine. The Administrator, in its discretion, may accelerate the time at which any restrictions will lapse or be removed.

(f) Voting Rights. During the Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.

(g) Dividends and Other Distributions. During the Period of Restriction, Service Providers holding Shares of Restricted Stock will be entitled to receive all dividends and other distributions paid with respect to such Shares, unless the Administrator provides otherwise. If any such dividends or distributions are paid in Shares, the Shares will be subject to the same restrictions on transferability and forfeitability as the Shares of Restricted Stock with respect to which they were paid.

(h) Return of Restricted Stock to Company. On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.

9. Restricted Stock Units.

(a) Grant. Restricted Stock Units may be granted at any time and from time to time as determined by the Administrator. After the Administrator determines that it will grant Restricted Stock Units, it will advise the Participant in an Award Agreement of the terms, conditions, and restrictions related to the grant, including the number of Restricted Stock Units.

(b) Vesting Criteria and Other Terms. The Administrator will set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will be paid out to the Participant. The Administrator may set vesting criteria based upon the achievement of Company-wide, business unit, or individual goals (including, but not limited to, continued employment or service), or any other basis determined by the Administrator in its discretion.

(c) Earning Restricted Stock Units. Upon meeting the applicable vesting criteria, the Participant will be entitled to receive a payout as determined by the Administrator. Notwithstanding the foregoing, at any time after the grant of Restricted Stock Units, the Administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout.

(d) Form and Timing of Payment. Payment of earned Restricted Stock Units will be made as soon as practicable after the date(s) determined by the Administrator and set forth in the Award Agreement. The Administrator, in its sole discretion, may settle earned Restricted Stock Units in cash, Shares, or a combination of both.

(e) Cancellation. On the date set forth in the Award Agreement, all unearned Restricted Stock Units will be forfeited to the Company.

10. Compliance With Code Section 409A. Awards will be designed and operated in such a manner that they are either exempt from the application of, or comply with, the requirements of Code Section 409A, except as otherwise determined in the sole discretion of the Administrator. The Plan and each Award Agreement under the Plan is intended to meet the requirements of Code Section 409A and will be construed and interpreted in accordance with such intent, except as

otherwise determined in the sole discretion of the Administrator. To the extent that an Award or payment, or the settlement or deferral thereof, is subject to Code Section 409A the Award will be granted, paid, settled or deferred in a manner that will meet the requirements of Code Section 409A, such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Code Section 409A.

11. Leaves of Absence/Transfer Between Locations. Unless the Administrator provides otherwise, vesting of Awards granted hereunder will be suspended during any unpaid leave of absence. A Participant will not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, or any Subsidiary. For purposes of Incentive Stock Options, no such leave may exceed three (3) months, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then six (6) months following the first (1st) day of such leave, any Incentive Stock Option held by the Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.

12. Limited Transferability of Awards.

(a) Unless determined otherwise by the Administrator, Awards may not be sold, pledged, assigned, hypothecated, or otherwise transferred in any manner other than by will or by the laws of descent and distribution, and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, such Award may only be transferred (i) by will, (ii) by the laws of descent and distribution, or (iii) as permitted by Rule 701 of the Securities Act of 1933, as amended (the "Securities Act").

(b) Further, until the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, or after the Administrator determines that it is, will, or may no longer be relying upon the exemption from registration under the Exchange Act as set forth in Rule 12h-1(f) promulgated under the Exchange Act, an Option, or prior to exercise, the Shares subject to the Option, may not be pledged, hypothecated or otherwise transferred or disposed of, in any manner, including by entering into any short position, any "put equivalent position" or any "call equivalent position" (as defined in Rule 16a-1(h) and Rule 16a-1(b) of the Exchange Act, respectively), other than to (i) persons who are "family members" (as defined in Rule 701(c)(3) of the Securities Act) through gifts or domestic relations orders, or (ii) to an executor or guardian of the Participant upon the death or disability of the Participant. Notwithstanding the foregoing sentence, the Administrator, in its sole discretion, may determine to permit transfers to the Company or in connection with a Change in Control or other acquisition transactions involving the Company to the extent permitted by Rule 12h-1(f).

13. Adjustments; Dissolution or Liquidation; Merger or Change in Control.

(a) Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator, in order to prevent diminution or

enlargement of the benefits or potential benefits intended to be made available under the Plan, will adjust the number and class of Shares that may be delivered under the Plan and/or the number, class, and price of Shares covered by each outstanding Award; provided, however, that the Administrator will make such adjustments to an Award required by Section 25102(o) of the California Corporations Code to the extent the Company is relying upon the exemption afforded thereby with respect to the Award.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

(c) Merger or Change in Control. In the event of a merger or Change in Control, each outstanding Award will be treated as the Administrator determines without a Participant's consent, including, without limitation, that (i) Awards will be assumed, or substantially equivalent Awards will be substituted, by the acquiring or succeeding corporation (or an affiliate thereof) with appropriate adjustments as to the number and kind of shares and prices; (ii) upon written notice to a Participant, that the Participant's Awards will terminate upon or immediately prior to the consummation of such merger or Change in Control (subject to the provisions of the proceeding paragraph); (iii) outstanding Awards will vest and become exercisable, realizable, or payable, or restrictions applicable to an Award will lapse, in whole or in part prior to or upon consummation of such merger or Change in Control, and, to the extent the Administrator determines, terminate upon or immediately prior to the effectiveness of such merger of Change in Control; (iv) (A) the termination of an Award in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon the exercise of such Award or realization of the Participant's rights as of the date of the occurrence of the transaction (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction the Administrator determines in good faith that no amount would have been attained upon the exercise of such Award or realization of the Participant's rights, then such Award may be terminated by the Company without payment), or (B) the replacement of such Award with other rights or property selected by the Administrator in its sole discretion; or (v) any combination of the foregoing. In taking any of the actions permitted under this subsection 13(c), the Administrator will not be obligated to treat all Awards, all Awards held by a Participant, or all Awards of the same type, similarly.

In the event that the successor corporation does not assume or substitute for the Award (or portion thereof), the Participant will fully vest in and have the right to exercise all of his or her outstanding Options and Stock Appreciation Rights, including Shares as to which such Awards would not otherwise be vested or exercisable, all restrictions on Restricted Stock and Restricted Stock Units will lapse, and, with respect to Awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at one hundred percent (100%) of target levels and all other terms and conditions met. In addition, if an Option or Stock Appreciation Right is not assumed or substituted in the event of a merger or Change in Control, the Administrator will notify the Participant in writing or electronically that the Option or Stock Appreciation Right will be exercisable for a period of time determined by the Administrator in its sole discretion, and the Option or Stock Appreciation Right will terminate upon the expiration of such period.

For the purposes of this subsection 13(c), an Award will be considered assumed if, following the merger or Change in Control, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the merger or Change in Control, the consideration (whether stock, cash, or other securities or property) received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the merger or Change in Control is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of an Option or Stock Appreciation Right or upon the payout of a Restricted Stock Unit, for each Share subject to such Award, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the merger or Change in Control.

Notwithstanding anything in this Section 13(c) to the contrary, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the Company or its successor modifies any of such performance goals without the Participant's consent; provided, however, a modification to such performance goals only to reflect the successor corporation's post-Change in Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

Notwithstanding anything in this Section 13(c) to the contrary, if a payment under an Award Agreement is subject to Code Section 409A and if the change in control definition contained in the Award Agreement does not comply with the definition of "change of control" for purposes of a distribution under Code Section 409A, then any payment of an amount that is otherwise accelerated under this Section will be delayed until the earliest time that such payment would be permissible under Code Section 409A without triggering any penalties applicable under Code Section 409A.

14. Tax Withholding.

(a) Withholding Requirements. Prior to the delivery of any Shares or cash pursuant to an Award (or exercise thereof), the Company will have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy federal, state, local, foreign or other taxes (including the Participant's FICA obligation) required to be withheld with respect to such Award (or exercise thereof).

(b) Withholding Arrangements. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such tax withholding obligation, in whole or in part by (without limitation) (i) paying cash, (ii) electing to have the Company withhold otherwise deliverable Shares having a Fair Market Value equal to the minimum statutory amount required to be withheld, (iii) delivering to the Company already-owned Shares having a Fair Market Value equal to the statutory amount required to be withheld, provided the delivery of such Shares will not result in any adverse accounting consequences, as the Administrator determines in its sole discretion, or (iv) selling a sufficient number of Shares otherwise deliverable to the Participant through such means as the Administrator may determine in its sole discretion (whether through a broker or otherwise) equal to the amount

required to be withheld. The amount of the withholding requirement will be deemed to include any amount which the Administrator agrees may be withheld at the time the election is made, not to exceed the amount determined by using the maximum federal, state or local marginal income tax rates applicable to the Participant with respect to the Award on the date that the amount of tax to be withheld is to be determined. The Fair Market Value of the Shares to be withheld or delivered will be determined as of the date that the taxes are required to be withheld.

15. No Effect on Employment or Service. Neither the Plan nor any Award will confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider with the Company, nor will they interfere in any way with the Participant's right or the Company's right to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.

16. Date of Grant. The date of grant of an Award will be, for all purposes, the date on which the Administrator makes the determination granting such Award, or such other later date as is determined by the Administrator. Notice of the determination will be provided to each Participant within a reasonable time after the date of such grant.

17. Term of Plan. Subject to Section 21 of the Plan, the Plan will become effective upon its adoption by the Board. Unless sooner terminated under Section 18, it will continue in effect for a term of ten (10) years from the later of (a) the effective date of the Plan, or (b) the earlier of the most recent Board or stockholder approval of an increase in the number of Shares reserved for issuance under the Plan.

18. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Board may at any time amend, alter, suspend or terminate the Plan.

(b) Stockholder Approval. The Company will obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

(c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan will impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination.

19. Conditions Upon Issuance of Shares.

(a) Legal Compliance. Shares will not be issued pursuant to the exercise of an Award unless the exercise of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any

such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

20. Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, will relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority will not have been obtained.

21. Stockholder Approval. The Plan will be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted by the Board. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws.

22. Information to Participants. Beginning on the earlier of (i) the date that the aggregate number of Participants under this Plan is five hundred (500) or more and the Company is relying on the exemption provided by Rule 12h-1(f)(1) under the Exchange Act and (ii) the date that the Company is required to deliver information to Participants pursuant to Rule 701 under the Securities Act, and until such time as the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, is no longer relying on the exemption provided by Rule 12h-1(f)(1) under the Exchange Act or is no longer required to deliver information to Participants pursuant to Rule 701 under the Securities Act, the Company shall provide to each Participant the information described in paragraphs (e)(3), (4), and (5) of Rule 701 under the Securities Act not less frequently than every six (6) months with the financial statements being not more than one hundred-eighty (180) days old and with such information provided either by physical or electronic delivery to the Participants or by written notice to the Participants of the availability of the information on an Internet site that may be password-protected and of any password needed to access the information. The Company may request that Participants agree to keep the information to be provided pursuant to this section confidential. If a Participant does not agree to keep the information to be provided pursuant to this section confidential, then the Company will not be required to provide the information unless otherwise required pursuant to Rule 12h-1(f)(1) under the Exchange Act or Rule 701 of the Securities Act.

APPENDIX A

FLUIDIGM CORPORATION

2009 EQUITY INCENTIVE PLAN

Additional Terms and Conditions for Options received by Employees Resident in the Netherlands

The additional terms and conditions detailed below are to be read in conjunction with the Plan and the Award Agreement relating to Options granted to Employees resident in the Netherlands. Any terms and provisions not specifically defined below for Employees subject to the laws of the Netherlands will have the same meaning as defined in the Plan and the applicable Award Agreement.

1. Definitions. Notwithstanding the provisions of the Plan, the following definitions shall apply for Options granted to Employees resident in the Netherlands.

(a) Acknowledgement Date. "Acknowledgement Date" means the date upon which an Award Agreement is signed and returned to the Company (or the Employee's employer if so designated by the Company) by the Employee.

(c) Employee. "Employee" means any person permanently employed by the Company or any Parent or Subsidiary of the Company based upon such factors as are deemed appropriate by the Administrator in its discretion, subject to any requirments and provisions of the applicable Dutch laws, including the provisions of the Dutch Civil Code (*Burgerlijk Wetboek*). The term "Employee", however, shall not include an individual who, either by himself or through his Relative or through a corporate entity, holds, directly or indirectly, five percent (5%) or more of the equity of the Company.

(d) Relative. "Relative" means immediate relative, namely one's spouse, parent, parent of spouse, brother, sister, brother of spouse, sister of spouse or child of the person or spouse.

2. Eligibility. Notwithstanding the provisions of the Plan, Options granted to residents of the Netherlands may only be granted to Employees who, either by themselves or through a corporate entity or through his Relative, do not hold, directly or indirectly, five percent (5%) or more of the equity of the Company. Consultants resident in the Netherlands shall not be eligible to receive Options.

Options may be granted to Employees in accordance with the terms of the Plan and this Appendix A to the Plan as the Administrator deems appropriate. In determining which Employees may be granted Options, the Administrator will take into account whether will provide additional incentive to Employees and whether such Options will promote the success of the Company's business.

3. Dutch Taxes. Notwithstanding the provisions of the Plan and pursuant to Section 4(b)(viii) of this Plan, the following shall apply for residents in the Netherlands:

(a) All tax and social security consequences and obligations regarding any other compulsory payments arising from the grant, possesion or exercise of any Options, from the payment for, or the subsequent possesion or disposition of or from any other event or act of the Company (or the Employee's employer) or the Employee hereunder, shall be borne solely by the Employee, and the Employee shall indemnify the Company (or the Employee's employer) and hold it harmless against and from any and all liability for any such tax or social security payment, or interest or penalty thereon, including without limitation, liabilities relating to the necessity to withhold, or to have withheld, any such tax or social security payment from any payment made to the Employee.

(b) The Company (or the Employee's employer) is at any time entitled to withhold from wages payable to the Employee any tax and social security amounts due with respect to the grant or exercise of any Options.

(c) On the Acknowledgement Date, the Employee may deliver to the Company a signed written notice in accordance with Article 10(a)(3) of the Dutch Wage Tax Act 1964 (*Wet op de Loonbelasting 1964*) (hereafter: the "Written Notice") with respect to the Options. The Written Notice will indicate that Dutch withholding tax will be due upon exercise of the Options. If no such Written Notice has been received by the Company on the Acknowledgement Date, any withholding tax will automatically be due upon vesting of the Options.

The Company shall immediately send the Written Notice to the competent Dutch tax authorities. Notwithstanding the provisions under Section 6(f) of the Plan, if a Written Notice has been received by the Company on the Acknowledgement Date, the Options granted under Appendix A will not be exercisable until the competent Dutch tax authorities has received the Written Notice.

4. Merger or Change in Control. Notwithstanding the provisions of Section 13(c), if the successor corporation (or any parent or subsidiary thereof) intends to assume or substitute each outstanding Option in a merger of the Company with or into another corporation, or a Change in Control and the rules and regulations governing Options granted to Employees in the Netherlands (the "Netherlands Options") do not permit assumption or substitution of the Netherlands Options in the same manner as other Options, then the Administrator, in its discretion, may provide for the termination of the Netherlands Options upon the consummation of the transaction or provide for the assumption or substitution of the Netherlands Options in a different manner than the assumption or substitution of other Options.

APPENDIX B

FLUIDIGM CORPORATION

2009 EQUITY INCENTIVE PLAN

Additional Terms and Conditions for Options received by Employees Resident in France

The additional terms and conditions detailed below are to be read in conjunction with the Plan and the Award Agreement relating to Options granted to Employees resident in France. Any terms and provisions not specifically defined below for Employees subject to the laws of France will have the same meaning as defined in the Plan and the applicable Award Agreement.

In order to promote compliance of the Plan with the principles set out by the French tax authorities in their regulations 4 N 2431 dated August 30, 1997, in furtherance of Article 80 bis III of the French Code Général des Impôts, any Option granted under the Plan to residents of France will be subject to the conditions stated below.

As a matter of principle, any provision included in the Plan, the Award Agreement or any other document evidencing the terms and conditions of an Option that would contravene any substantive principle set out in Articles L.225-177 to L.225-186 of the French Code de Commerce shall not be applicable to Participants who are residents of France.

1. Definitions. Notwithstanding the provisions of the Plan, the following definitions shall apply for Options granted to Employees resident in France.

(a) Applicable Laws. "Applicable Laws" means the legal requirements relating to the administration of stock option plans under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and French corporate, securities, labor and tax laws.

(b) Employee. "Employee" means (i) any person employed by the Company or a branch of the Company or a Subsidiary in a salaried position within the meaning Applicable Laws, who does not own more than ten percent (10%) of the voting power of all classes of stock of the Company, or any Parent or Subsidiary, and who is a resident of the Republic of France or (ii) any person employed by the Company or a branch of the Company or a Subsidiary who is a resident of the Republic of France for tax purposes or who performs his or her duties in France and is subject to French income social security contributions on his or her remuneration.

(c) Fair Market Value. "Fair Market Value" means, as of any date, the dollar value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq Global Market or the Nasdaq Global Select Market of the Nasdaq Stock Market, its Fair Market Value will be the average quotation price for the last twenty (20) days preceding the date of determination for such Common Stock (or the average closing bid for such twenty (20) day period, if no sales were reported) as

quoted on such exchange or system and reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(ii) If the Common Stock is quoted on the Nasdaq Stock market (but not on the Nasdaq Global Market or Nasdaq Global Select Market thereof) or regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value will be the mean between the high bid and low asked prices for the Common Stock for the last twenty (20) days preceding the date of determination; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value thereof will be determined in good faith by the Administrator.

(d) Subsidiary. "Subsidiary" means any participating subsidiary of the Company located in the Republic of France and that falls within the definition of "subsidiary" within the meaning of Section L. 225-180 paragraph 1 of the French commercial code.

(e) Termination. "Termination" means if the Participant is an Employee, the last day of any statutory or contractual notice period whether worked or not (provided, only the employer, and not the Participant, may decide whether the Participant works during the notice period) and irrespective of whether the termination of the employment agreement is due to resignation or dismissal of the Employee for any reason whatsoever; if the Participant is a corporate officer as defined in Section 2 of this Appendix B, Termination means the date on which he or she effectively leaves his or her position as a corporate officer for any reason whatsoever.

2. Eligibility. Options granted pursuant to this Appendix B may be granted only to Employees, the *Président du conseil d'administration*, the *membres du directoire*, the *Directeur général*, the directeurs généraux délégués, the *Gérant* of a company with capital divided by shares; provided, however, that the *administrateurs* and the *membres du conseil de surveillance* who are also Employees of the Subsidiary in accordance with a valid employment agreement pursuant to Applicable Laws may be granted Options hereunder. For the purpose of this Appendix B, when applicable, the rules set forth for an Employee will be applicable to the aforementioned corporate officers.

3. Stock Subject to the Plan. The total number of Options outstanding which may be exercised for newly issued Shares may at no time exceed that number equal to one-third (1/3rd) of the Company's voting stock, whether preferred stock of the Company or Common Stock. If any Shares subject to Options are to consist of reacquired Shares, such Shares subject to Options must be purchased by the Company, in the limit of ten percent (10%) of its share capital, prior to the date of the grant of the corresponding new Option and must be reserved and set aside for such purposes. In addition, the new Option must be granted within one (1) year of the acquisition of the Shares underlying such new Option.

4. Limitations Upon Granting of Options.

(a) Declaration of Dividend; Capital Increase. To the extent applicable to the Company, Options cannot be granted during the twenty (20) trading days from (i) the date the Common Stock is trading on an ex-dividend basis or (ii) a capital increase.

(b) Non-Public Information. To the extent applicable to the Company, the Company will not grant Options during the closed periods required under Section L 225-177 of the French Commercial Code. As a result, notwithstanding any other provision of the Plan, Options cannot be granted:

(i) during the ten (10) trading days preceding and following the date on which the consolidated accounts, or, if unavailable, the annual accounts, are made public;

(ii) during the period between the date on which the Company's governing bodies (i.e., the Board) become aware of information which, if made public, could have a material impact on the price of the Shares, and the date ten (10) trading days after such information is made public.

(c) Right to Employment. Neither the Plan nor any Option will confer upon any Participant any right with respect to continuing the Participant's employment relationship with the Company or any Subsidiary.

5. Exercise Price. The exercise price for the Shares to be issued pursuant to exercise of an Option will be determined by the Administrator upon the date of grant of the Option and stated in the Award Agreement, but in no event will be less than the higher of (i) eighty percent (80%) of (A) the Fair Market Value on the date the Option is granted, or (B) if applicable, the average purchase price paid by the Company for such Shares, or (ii) the exercise price as determined under Section 6(e) of the Plan. The exercise price cannot be modified while an Option is outstanding, except as required by Applicable Laws.

6. Term of Option. The term of each Option will be as stated in the Award Agreement; provided, however, that the maximum term of an Option will not exceed ten (10) years from the date of grant of the Option.

7. Exercise of Option; Restriction on Sale.

(a) Except as otherwise explicitly set forth in the Award Agreement, Options granted hereunder may be not be exercised within one (1) year of the date the Option is granted (the "Initial Exercise Date") whether or not the Option has vested prior to such time; provided, however, that the Initial Exercise Date will be automatically adjusted to conform with any changes under Applicable Laws so that the length of time from the date of grant to the Initial Exercise Date when added to the length of time in which Shares may not be disposed of after the Initial Exercise Date as provided in Section 7(b) below, will allow for favorable tax and social security treatment under Applicable Laws. Thereafter, Options may be exercised to the extent they have vested.

An Option will be deemed exercised when the Company receives: (i) written or electronic notice of exercise (in accordance with the Award Agreement) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised together with any applicable withholding taxes and social security contributions. Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares,

notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 13 of the Plan and to the extent permitted by Applicable Law.

(b) The Shares subject to an Option may not be transferred, assigned or hypothecated in any manner otherwise than by will or by the laws of descent or distribution before the date three (3) years from the Initial Exercise Date, except for any events provided for in Article 91 ter of Annex II to the French tax code; provided, however, that the duration of this restriction on sale will be automatically adjusted to conform with any changes to the holding period required for favorable tax and social security treatment under Applicable Laws to the extent permitted under Applicable Laws.

(c) Termination of Employment Relationship. Upon Termination of an Participant's status as an Employee (other than upon the Participant's death or Disability), the Participant may exercise his or her Option within such period of time as specified in the Award Agreement, and only to the extent that the Participant was entitled to exercise it at the date of Termination (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). If, at the date of Termination, the Participant is not entitled to exercise his or her entire Option, the Shares covered by the unexercisable portion of the Option will revert to the Plan. If, after Termination, the Participant does not exercise his or her Option within the time specified by the Administrator, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(d) Disability of Participant. Upon Termination of a Participant's status as an Employee terminates as a result of the Participant's Disability, the Participant may exercise his or her Option at any time within such period of time as specified in the Award Agreement, but only to the extent that the Participant was entitled to exercise it at the date of such Termination (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). If, at the date of Termination, the Participant is not entitled to exercise his or her entire Option, the Shares covered by the unexercisable portion of the Option will revert to the Plan. If, after Termination, the Participant does not exercise his or her Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(e) Death of Participant. In the event of the death of a Participant while an Employee, the Option may be exercised at any time within six (6) months following the date of death by the Participant's estate or by a person who acquired the right to exercise the Option by bequest or inheritance, but only to the extent that the Participant was entitled to exercise the Option at the date of death. If, at the time of death, the Participant was not entitled to exercise his or her entire Option, the Shares covered by the unexercisable portion of the Option will revert to the Plan. If, after death, the Participant's estate or a person who acquired the right to exercise the Option by bequest or inheritance does not exercise the Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will immediately revert to the Plan.

8. Non-Transferability of Options. An Option may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant.

9. Changes in Capitalization. If any adjustment provided for in Section 13(a) of the Plan to the exercise price and the number of shares of Common Stock covered by outstanding Options would violate Applicable Laws in such a way to jeopardize the favorable tax and social security treatment of this Plan together with this Appendix B and the Options granted thereunder, then no such adjustment will be made prior to the exercise of any such outstanding Option.

10. Information Statements to Participants. The Company or its Subsidiary, as required under Applicable Laws, will provide to each Participant, with copies to the appropriate governmental entities, such statements of information as required by the Applicable Laws.

11. Reporting to the Stockholders' Meeting. The Subsidiary of the Company, if required under Applicable Laws, will provide its stockholders with an annual report with respect to Options granted and/or exercised by its Employees in the financial year.

APPENDIX C

Neither this document, nor any option agreement connected with it, is an approved prospectus for the purposes of section 85(1) of the Financial Services and Markets Act 2000 ("FSMA") and no offer of transferable securities to the public (for the purposes of section 102B of FSMA) is being made in connection with the UK Sub-Plan of the Fluidigm Corporation 1999 Stock Option Plan (as amended April 24, 2007, January 29, 2008, April 24, 2008). The Sub-Plan is exclusively available to bona fide employees and former employees of Fluidigm Corporation and its subsidiaries, if any.

FLUIDIGM CORPORATION

UK SUB-PLAN OF THE

2009 EQUITY INCENTIVE PLAN

Additional Terms and Conditions for Options received by Employees Resident in the United Kingdom

This Sub-Plan is governed by the and all its provisions shall be identical to those of the Plan SAVE THAT (i) "Sub-Plan" shall be substituted for "Plan" where applicable, (except where the "Plan" is referred to below) and (ii) the following provisions shall be as stated in this Sub-Plan in order to accommodate the specific requirements of the laws of England and Wales and the appropriate UK tax legislation.

1. Section 1 – Purposes of the Plan

   The words "Directors and Consultants" shall be deleted.

   The final sentence shall be deleted and replaced as follows;

   "Options granted under the Plan shall be unapproved options."

2. Section 2 – Definitions

   The following definitions shall not apply to the Sub-Plan:

   (k) "Consultant"

   (r) "Incentive Stock Option"

   (o) "Nonstatutory Stock Option"

   The following definitions shall be deleted and replaced as follows:

   (x) "Service Provider" means an Employee.

The following definitions shall be added:

(ee) "Unapproved Option" means an Option that is neither an HM Revenue & Customs approved Company Share Option Plan nor an Enterprise Management Incentives (EMI) Option.

3. Section 5 – Eligibility

Sections 5 shall be deleted and replaced as follows:

"Employees may be granted Unapproved Stock Options."

4. Section 17 – Term of Plan

Section 17 shall be deleted and replaced as follows:

This Sub-Plan shall become effective upon its adoption by the Board. It shall continue in effect for as long as the as the Plan is effective unless sooner terminated under Section 18 of the Plan.

5. Section 6(d) – Term of Option

The second sentence of Section 6(d) shall be deleted.

6. Section 6(e) – Option Exercise Price and Consideration

The second and third sentence Section 6(e)(i) shall be deleted in its entirety.

Section 6(e)(iii) shall be deleted and replaced as follows:

"The consideration to be paid for the Shares to be issued upon exercise of an Option, including the method of payment, shall be determined by the Administrator. Such consideration may consist of (1) cash, (2) cheque, (3) consideration received by the Company under a cashless exercise program implemented by the Company in connection with the Plan, or (4) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws, (5) any combination of the foregoing methods of payment. In making its determination as to the type of consideration to accept, the Administrator shall consider if acceptance of such consideration may be reasonably expected to benefit the Company."

7. Section 6(f) – Exercise of Option

Section 6(f)(iv) shall be amended by deleting the words "estate or by the person(s) to whom the Option is tranferred pursuant to Participant's will or in accordance with the laws of descent and distribution" and replacing them with the words "personal representatives."

8. Section 12 – Limited Transferability of Awards

This section shall be deleted in its entirety and replaced as follows:

"The Option may not be transferred in any manner other than to the personal representatives on the death of the Optionee. The Option may be exercised during the lifetime of the Optionee only by the Optionee."

9. Section 21 – Stockholder Approval

This Section shall be deleted in its entirety and replaced as follows:

"**Withholding Taxes.** In the event that the Company determines that it is required to account to HM Revenue & Customs for income tax (under PAYE) or any other taxation provisions and primary class 1 National Insurance Contributions in the United Kingdom to the extent arising from the grant, exercise, assignment, release, cancellation or any other disposal of an Option or the Secondary NIC Liability (as defined in the Stock Option Agreement) as a result of the exercise of this Option, the Optionee, as condition to the exercise of this Option, shall make arrangements satisfactory to the Company to enable it to satisfy all such requirements. The Optionee shall also make arrangements satisfactory to the Company to enable it to satisfy any requirement to account for tax, if any, that may arise in connection with the disposition of Shares purchased by exercising this option."

Exhibit 10.3A

FLUIDIGM CORPORATION

2009 EQUITY INCENTIVE PLAN

STOCK OPTION AGREEMENT

Unless otherwise defined herein, the terms defined in the 2009 Equity Incentive Plan (the "Plan") shall have the same defined meanings in this Stock Option Agreement (the "Option Agreement").

I. NOTICE OF STOCK OPTION GRANT

Name:
Address:

The undersigned Participant has been granted an Option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan and this Option Agreement, as follows:

Date of Grant:

Vesting Commencement Date:

Exercise Price per Share: $

Total Number of Shares Granted:

Total Exercise Price : $

Type of Option: ☐ Incentive Stock Option

☐ Nonstatutory Stock Option

Term/Expiration Date:

Vesting Schedule:

This Option shall be exercisable, in whole or in part, according to the following vesting schedule:

[Vesting Schedule]

Termination Period:

This Option shall be exercisable for three (3) months after Participant ceases to be a Service Provider, unless such termination is due to Participant's death or Disability, in which case this

Option shall be exercisable for twelve (12) months after Participant ceases to be a Service Provider. Notwithstanding the foregoing sentence, in no event may this Option be exercised after the Term/Expiration Date as provided above and this Option may be subject to earlier termination as provided in Section 13(c) of the Plan.

II. AGREEMENT

1. Grant of Option. The Administrator of the Company hereby grants to the Participant named in the Notice of Stock Option Grant in Part I of this Agreement ("Participant"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Stock Option Grant, at the exercise price per Share set forth in the Notice of Stock Option Grant (the "Exercise Price"), and subject to the terms and conditions of the Plan, which is incorporated herein by reference. Subject to Section 18(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and this Option Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Stock Option Grant as an Incentive Stock Option ("ISO"), this Option is intended to qualify as an Incentive Stock Option as defined in Section 422 of the Code. Nevertheless, to the extent that it exceeds the $100,000 rule of Code Section 422(d), this Option shall be treated as a Nonstatutory Stock Option ("NSO"). Further, if for any reason this Option (or portion thereof) shall not qualify as an ISO, then, to the extent of such nonqualification, such Option (or portion thereof) shall be regarded as a NSO granted under the Plan. In no event shall the Administrator, the Company or any Parent or Subsidiary or any of their respective employees or directors have any liability to Participant (or any other person) due to the failure of the Option to qualify for any reason as an ISO.

2. Exercise of Option.

(a) Right to Exercise. This Option shall be exercisable during its term in accordance with the Vesting Schedule set out in the Notice of Stock Option Grant and with the applicable provisions of the Plan and this Option Agreement.

(b) Method of Exercise. This Option shall be exercisable by delivery of an exercise notice in the form attached as Exhibit A (the "Exercise Notice") or in a manner and pursuant to such procedures as the Administrator may determine, which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised, and such other representations and agreements as may be required by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares, together with any applicable tax withholding. This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Exercise Price, together with any applicable tax withholding.

No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise comply with Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to Participant on the date on which the Option is exercised with respect to such Shares.

3. Participant's Representations. In the event the Shares have not been registered under the Securities Act of 1933, as amended, at the time this Option is exercised, Participant shall, if required by the Company, concurrently with the exercise of all or any portion of this Option, deliver to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit B.

4. Lock-Up Period. Participant hereby agrees that Participant shall not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any Common Stock (or other securities) of the Company or enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Common Stock (or other securities) of the Company held by Participant (other than those included in the registration) for a period specified by the representative of the underwriters of Common Stock (or other securities) of the Company not to exceed one hundred and eighty (180) days following the effective date of any registration statement of the Company filed under the Securities Act (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto).

Participant agrees to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriter which are consistent with the foregoing or which are necessary to give further effect thereto. In addition, if requested by the Company or the representative of the underwriters of Common Stock (or other securities) of the Company, Participant shall provide, within ten (10) days of such request, such information as may be required by the Company or such representative in connection with the completion of any public offering of the Company's securities pursuant to a registration statement filed under the Securities Act. The obligations described in this Section II.4 shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a Commission Rule 145 transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions with respect to the shares of Common Stock (or other securities) subject to the foregoing restriction until the end of said one hundred and eighty (180) day (or other) period. Participant agrees that any transferee of the Option or shares acquired pursuant to the Option shall be bound by this Section 4.

5. Method of Payment. Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of the Participant:

(a) cash;

(b) check;

(c) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan (which shall include, without limitation, the ability to net exercise the Option); or

(d) surrender of other Shares which (i) shall be valued at its Fair Market Value on the date of exercise, and (ii) must be owned free and clear of any liens, claims, encumbrances or security interests, if accepting such Shares, in the sole discretion of the Administrator, shall not result in any adverse accounting consequences to the Company.

6. Restrictions on Exercise. This Option may not be exercised until such time as the Plan has been approved by the stockholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any Applicable Law.

7. Non-Transferability of Option.

(a) This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Participant only by Participant. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of Participant.

(b) Further, until the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, or after the Administrator determines that it is, will, or may no longer be relying upon the exemption from registration of Options under the Exchange Act as set forth in Rule 12h-1(f) promulgated under the Exchange Act (the "Reliance End Date"), Participant shall not transfer this Option or, prior to exercise, the Shares subject to this Option, in any manner other than (i) to persons who are "family members" (as defined in Rule 701(c)(3) of the Securities Act of 1933, as amended) through gifts or domestic relations orders, or (ii) to an executor or guardian of Participant upon the death or disability of Participant. Until the Reliance End Date, the Options and, prior to exercise, the Shares subject to this Option, may not be pledged, hypothecated or otherwise transferred or disposed of, including by entering into any short position, any "put equivalent position" or any "call equivalent position" (as defined in Rule 16a-1(h) and Rule 16a-1(b) of the Exchange Act, respectively), other than as permitted in clauses (i) and (ii) of this paragraph.

8. Term of Option. This Option may be exercised only within the term set out in the Notice of Stock Option Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option.

9. Tax Obligations.

(a) Tax Withholding. Participant agrees to make appropriate arrangements with the Company (or the Parent or Subsidiary employing or retaining Participant) for the satisfaction of all Federal, state, local and foreign income and employment tax withholding requirements applicable to the Option exercise. Participant acknowledges and agrees that the Company may refuse to honor the exercise and refuse to deliver the Shares if such withholding amounts are not delivered at the time of exercise.

(b) Notice of Disqualifying Disposition of ISO Shares. If the Option granted to Participant herein is an ISO, and if Participant sells or otherwise disposes of any of the Shares acquired pursuant to the ISO on or before the later of (i) the date two (2) years after the Date of

Grant, or (ii) the date one (1) year after the date of exercise, Participant shall immediately notify the Company in writing of such disposition. Participant agrees that Participant may be subject to income tax withholding by the Company on the compensation income recognized by Participant.

(c) Code Section 409A. Under Code Section 409A, an Option that vests after December 31, 2004 (or that vested on or prior to such date but which was materially modified after October 3, 2004) that was granted with a per Share exercise price that is determined by the Internal Revenue Service (the "IRS") to be less than the Fair Market Value of a Share on the date of grant (a "discount option") may be considered "deferred compensation." An Option that is a "discount option" may result in (i) income recognition by Participant prior to the exercise of the Option, (ii) an additional twenty percent (20%) federal income tax, and (iii) potential penalty and interest charges. The "discount option" may also result in additional state income, penalty and interest tax to the Participant. Participant acknowledges that the Company cannot and has not guaranteed that the IRS will agree that the per Share exercise price of this Option equals or exceeds the Fair Market Value of a Share on the date of grant in a later examination. Participant agrees that if the IRS determines that the Option was granted with a per Share exercise price that was less than the Fair Market Value of a Share on the date of grant, Participant shall be solely responsible for Participant's costs related to such a determination.

10. Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant's interest except by means of a writing signed by the Company and Participant. This Agreement is governed by the internal substantive laws but not the choice of law rules of California.

11. No Guarantee of Continued Service. PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER. PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH PARTICIPANT'S RIGHT OR THE RIGHT OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) TO TERMINATE PARTICIPANT'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

Participant acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Option in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Participant further agrees to notify the Company upon any change in the residence address indicated below.

PARTICIPANT

Signature

Print Name

Residence Address

FLUIDIGM CORPORATION

By

Print Name

Title

EXHIBIT A

2009 EQUITY INCENTIVE PLAN

EXERCISE NOTICE

Fluidigm Corporation
7000 Shoreline Court, Suite 100
South San Francisco, CA 94080

Attention: Stock Plan Administrator

1. Exercise of Option. Effective as of today, _____, ____, the undersigned ("Participant") hereby elects to exercise Participant's option (the "Option") to purchase _____ shares of the Common Stock (the "Shares") of Fluidigm Corporation (the "Company") under and pursuant to the 2009 Equity Incentive Plan (the "Plan") and the Stock Option Agreement dated «GrantDate» (the "Option Agreement").

2. Delivery of Payment. Participant herewith delivers to the Company the full purchase price of the Shares, as set forth in the Option Agreement, and any and all withholding taxes due in connection with the exercise of the Option.

3. Representations of Participant. Participant acknowledges that Participant has received, read and understood the Plan and the Option Agreement and agrees to abide by and be bound by their terms and conditions.

4. Rights as Stockholder. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Common Stock subject to an Award, notwithstanding the exercise of the Option. The Shares shall be issued to Participant as soon as practicable after the Option is exercised in accordance with the Option Agreement. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance except as provided in Section 13 of the Plan.

5. Company's Right of First Refusal. Before any Shares held by Participant or any transferee (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section 5 (the "Right of First Refusal").

6. Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares (the

"Offered Price"), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

7. Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection 8 below.

8. Purchase Price. The purchase price ("Purchase Price") for the Shares purchased by the Company or its assignee(s) under this Section 5 shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

9. Payment. Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within thirty (30) days after receipt of the Notice or in the manner and at the times set forth in the Notice.

10. Holder's Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section 5, then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, *provided* that such sale or other transfer is consummated within one hundred and twenty (120) days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section 5 shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

11. Exception for Certain Family Transfers. Anything to the contrary contained in this Section 5 notwithstanding, the transfer of any or all of the Shares during the Participant's lifetime or on the Participant's death by will or intestacy to the Participant's immediate family or a trust for the benefit of the Participant's immediate family shall be exempt from the provisions of this Section 5. "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section 5, and there shall be no further transfer of such Shares except in accordance with the terms of this Section 5.

12. Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the earlier of (i) the first sale of Common Stock of the Company to the general public, or (ii) a Change in Control in which the successor corporation has equity securities that are publicly traded.

13. Tax Consultation. Participant understands that Participant may suffer adverse tax consequences as a result of Participant's purchase or disposition of the Shares. Participant represents that Participant has consulted with any tax consultants Participant deems advisable in connection with the purchase or disposition of the Shares and that Participant is not relying on the Company for any tax advice.

14. Restrictive Legends and Stop-Transfer Orders.

Legends. Participant understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

> THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.
>
> THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND A RIGHT OF FIRST REFUSAL HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE EXERCISE NOTICE BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL ARE BINDING ON TRANSFEREES OF THESE SHARES.
>
> THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER FOR A PERIOD OF TIME FOLLOWING THE EFFECTIVE DATE OF THE UNDERWRITTEN PUBLIC OFFERING OF THE COMPANY'S SECURITIES SET FORTH IN AN AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES AND MAY NOT BE SOLD OR OTHERWISE DISPOSED OF BY THE HOLDER PRIOR TO THE EXPIRATION OF SUCH PERIOD WITHOUT THE CONSENT OF THE COMPANY OR THE MANAGING UNDERWRITER.

15. Stop-Transfer Notices. Participant agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

16. Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this

Exercise Notice or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

17. Successors and Assigns. The Company may assign any of its rights under this Exercise Notice to single or multiple assignees, and this Exercise Notice shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Exercise Notice shall be binding upon Participant and his or her heirs, executors, administrators, successors and assigns.

18. Interpretation. Any dispute regarding the interpretation of this Exercise Notice shall be submitted by Participant or by the Company forthwith to the Administrator, which shall review such dispute at its next regular meeting. The resolution of such a dispute by the Administrator shall be final and binding on all parties.

19. Governing Law; Severability. This Exercise Notice is governed by the internal substantive laws, but not the choice of law rules, of California. In the event that any provision hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Exercise Notice shall continue in full force and effect.

20. Entire Agreement. The Plan and Option Agreement are incorporated herein by reference. This Exercise Notice, the Plan, the Option Agreement and the Investment Representation Statement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant's interest except by means of a writing signed by the Company and Participant.

Submitted by: PARTICIPANT	Accepted by: FLUIDIGM CORPORATION
_____ Signature	_____ By
_____ Print Name	_____ Print Name
	_____ Title
Address:	Address:
_____	_____
_____	_____
	_____ Date Received

EXHIBIT B

INVESTMENT REPRESENTATION STATEMENT

PARTICIPANT :

COMPANY : FLUIDIGM CORPORATION

SECURITY : COMMON STOCK

AMOUNT : _____

DATE : _____

In connection with the purchase of the above-listed Securities, the undersigned Participant represents to the Company the following:

(a) Participant is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Participant is acquiring these Securities for investment for Participant's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Participant acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Participant's investment intent as expressed herein. In this connection, Participant understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Participant's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one (1) year or any other fixed period in the future. Participant further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Participant further acknowledges and understands that the Company is under no obligation to register the Securities. Participant understands that the certificate evidencing the Securities shall be imprinted with any legend required under applicable state securities laws.

(c) Participant is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Option to Participant, the exercise shall be exempt from registration under the Securities Act. In the event the Company becomes subject to the reporting requirements of

Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701 may be resold, subject to the satisfaction of the applicable conditions specified by Rule 144, including in the case of affiliates (1) the availability of certain public information about the Company, (2) the amount of Securities being sold during any three (3) month period not exceeding specified limitations, (3) the resale being made in an unsolicited "broker's transaction", transactions directly with a "market maker" or "riskless principal transactions" (as those terms are defined under the Securities Exchange Act of 1934) and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Option, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which may require (i) the availability of current public information about the Company; (ii) the resale to occur more than a specified period after the purchase and full payment (within the meaning of Rule 144) for the Securities; and (iii) in the case of the sale of Securities by an affiliate, the satisfaction of the conditions set forth in sections (2), (3) and (4) of the paragraph immediately above.

(d) Participant further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption shall be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 shall have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Participant understands that no assurances can be given that any such other registration exemption shall be available in such event.

PARTICIPANT

_____
Signature

_____
Print Name

_____
Date

FLUIDIGM CORPORATION

2009 EQUITY INCENTIVE PLAN

STOCK OPTION AGREEMENT — EARLY EXERCISE

Unless otherwise defined herein, the terms defined in the 2009 Equity Incentive Plan (the "Plan") shall have the same defined meanings in this Stock Option Agreement – Early Exercise (the "Option Agreement").

I. NOTICE OF STOCK OPTION GRANT

Name:

Address:

The undersigned Participant has been granted an Option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan and this Option Agreement, as follows:

Date of Grant: _____

Vesting Commencement Date: _____

Exercise Price per Share: $_____

Total Number of Shares Granted: _____

Total Exercise Price: $_____

Type of Option: ____ Incentive Stock Option

____ Nonstatutory Stock Option

Term/Expiration Date: _____

Vesting Schedule:

This Option shall be exercisable, in whole or in part, according to the following vesting schedule:

[Vesting Schedule]

Termination Period:

This Option shall be exercisable for [three (3) months] after Participant ceases to be a Service Provider, unless such termination is due to Participant's death or Disability, in which case this Option shall be exercisable for [twelve (12) months] after Participant ceases to be a Service Provider. Notwithstanding the foregoing sentence, in no event may this Option be exercised after the Term/Expiration Date as provided above and this Option may be subject to earlier termination as provided in Section 13(c) of the Plan.

II. AGREEMENT

I. Grant of Option. The Administrator of the Company hereby grants to the Participant named in the Notice of Stock Option Grant in Part I of this Agreement ("Participant"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Stock Option Grant, at the exercise price per Share set forth in the Notice of Stock Option Grant (the "Exercise Price"), and subject to the terms and conditions of the Plan, which is incorporated herein by reference. Subject to Section 18(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and this Option Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Stock Option Grant as an Incentive Stock Option ("ISO"), this Option is intended to qualify as an Incentive Stock Option as defined in Section 422 of the Code. Nevertheless, to the extent that it exceeds the $100,000 rule of Code Section 422(d), this Option shall be treated as a Nonstatutory Stock Option ("NSO"). Further, if for any reason this Option (or portion thereof) shall not qualify as an ISO, then, to the extent of such nonqualification, such Option (or portion thereof) shall be regarded as a NSO granted under the Plan. In no event shall the Administrator, the Company or any Parent or Subsidiary or any of their respective employees or directors have any liability to Participant (or any other person) due to the failure of the Option to qualify for any reason as an ISO.

II. Exercise of Option. This Option shall be exercisable during its term in accordance with the provisions of Section 6 of the Plan as follows:

1. Right to Exercise.

(a) Subject to subsections II.1(b) and II.1(c) below, this Option shall be exercisable cumulatively according to the vesting schedule set forth in the Notice of Stock Option Grant. Alternatively, at the election of Participant, this Option may be exercised in whole or in part at any time as to Shares that have not yet vested. Vested Shares shall not be subject to the Company's repurchase right (as set forth in the Restricted Stock Purchase Agreement, attached hereto as Exhibit C-1).

(b) As a condition to exercising this Option for unvested Shares, Participant shall execute the Restricted Stock Purchase Agreement.

(c) This Option may not be exercised for a fraction of a Share.

2. Method of Exercise. This Option shall be exercisable by delivery of an exercise notice in the form attached as Exhibit A (the "Exercise Notice") or in a manner and pursuant to such procedures as the Administrator may determine, which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised, and such other representations and agreements as may be required by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares, together with any applicable tax withholding. This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Exercise Price, together with any applicable tax withholding.

No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise comply with Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to Participant on the date on which the Option is exercised with respect to such Shares.

III. Participant's Representations. In the event the Shares have not been registered under the Securities Act of 1933, as amended, at the time this Option is exercised, Participant shall, if required by the Company, concurrently with the exercise of all or any portion of this Option, deliver to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit B.

IV. Lock-Up Period. Participant hereby agrees that Participant shall not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any Common Stock (or other securities) of the Company or enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Common Stock (or other securities) of the Company held by Participant (other than those included in the registration) for a period specified by the representative of the underwriters of Common Stock (or other securities) of the Company not to exceed one hundred and eighty (180) days following the effective date of any registration statement of the Company filed under the Securities Act (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto).

Participant agrees to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriter which are consistent with the foregoing or which are necessary to give further effect thereto. In addition, if requested by the Company or the representative of the underwriters of Common Stock (or other securities) of the Company, Participant shall provide, within ten (10) days of such request, such information as may be required by the Company or such representative in connection with the completion of any public offering of the Company's securities pursuant to a registration statement filed under the Securities Act. The obligations described in this Section IV shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a Commission Rule 145 transaction on Form S-4 or similar forms that

may be promulgated in the future. The Company may impose stop-transfer instructions with respect to the shares of Common Stock (or other securities) subject to the foregoing restriction until the end of said one hundred and eighty (180) day (or other) period. Participant agrees that any transferee of the Option or shares acquired pursuant to the Option shall be bound by this Section IV.

V. Method of Payment. Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of the Participant:

1. cash;

2. check;

3. consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan (which shall include, without limitation, the ability to net exercise the Option); or

4. surrender of other Shares which (i) shall be valued at its Fair Market Value on the date of exercise, and (ii) must be owned free and clear of any liens, claims, encumbrances or security interests, if accepting such Shares, in the sole discretion of the Administrator, shall not result in any adverse accounting consequences to the Company.

VI. Restrictions on Exercise. This Option may not be exercised until such time as the Plan has been approved by the stockholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any Applicable Law.

VII. Non-Transferability of Option.

1. This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Participant only by Participant. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of Participant.

2. Further, until the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, or after the Administrator determines that it is, will, or may no longer be relying upon the exemption from registration of Options under the Exchange Act as set forth in Rule 12h-1(f) promulgated under the Exchange Act (the "Reliance End Date"), Participant shall not transfer this Option or, prior to exercise, the Shares subject to this Option, in any manner other than (i) to persons who are "family members" (as defined in Rule 701(c)(3) of the Securities Act of 1933, as amended) through gifts or domestic relations orders, or (ii) to an executor or guardian of Participant upon the death or disability of Participant. Until the Reliance End Date, the Options and, prior to exercise, the Shares subject to this Option, may not be pledged, hypothecated or otherwise transferred or disposed of, including by entering into any short position, any "put equivalent position" or any "call equivalent position" (as defined in Rule 16a-1(h) and Rule 16a-1(b) of the Exchange Act, respectively), other than as permitted in clauses (i) and (ii) of this paragraph.

VIII. Term of Option. This Option may be exercised only within the term set out in the Notice of Stock Option Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option.

IX. Tax Obligations.

1. Tax Withholding. Participant agrees to make appropriate arrangements with the Company (or the Parent or Subsidiary employing or retaining Participant) for the satisfaction of all Federal, state, local and foreign income and employment tax withholding requirements applicable to the Option exercise. Participant acknowledges and agrees that the Company may refuse to honor the exercise and refuse to deliver the Shares if such withholding amounts are not delivered at the time of exercise.

2. Notice of Disqualifying Disposition of ISO Shares. If the Option granted to Participant herein is an ISO, and if Participant sells or otherwise disposes of any of the Shares acquired pursuant to the ISO on or before the later of (i) the date two (2) years after the Date of Grant, or (ii) the date one (1) year after the date of exercise, Participant shall immediately notify the Company in writing of such disposition. Participant agrees that Participant may be subject to income tax withholding by the Company on the compensation income recognized by Participant.

3. Code Section 409 A. Under Code Section 409A, an Option that vests after December 31, 2004 (or that vested on or prior to such date but which was materially modified after October 3, 2004) that was granted with a per Share exercise price that is determined by the Internal Revenue Service (the "IRS") to be less than the Fair Market Value of a Share on the date of grant (a "discount option") may be considered "deferred compensation." An Option that is a "discount option" may result in (i) income recognition by Participant prior to the exercise of the Option, (ii) an additional twenty percent (20%) federal income tax, and (iii) potential penalty and interest charges. The "discount option" may also result in additional state income, penalty and interest tax to the Participant. Participant acknowledges that the Company cannot and has not guaranteed that the IRS will agree that the per Share exercise price of this Option equals or exceeds the Fair Market Value of a Share on the date of grant in a later examination. Participant agrees that if the IRS determines that the Option was granted with a per Share exercise price that was less than the Fair Market Value of a Share on the date of grant, Participant shall be solely responsible for Participant's costs related to such a determination.

X. Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant's interest except by means of a writing signed by the Company and Participant. This Agreement is governed by the internal substantive laws but not the choice of law rules of California.

XI. No Guarantee of Continued Service. PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL

OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER. PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH PARTICIPANT'S RIGHT OR THE RIGHT OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) TO TERMINATE PARTICIPANT'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

Participant acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Option in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Participant further agrees to notify the Company upon any change in the residence address indicated below.

PARTICIPANT	FLUIDIGM CORPORATION
_____	_____
Signature	By
_____	_____
Print Name	Print Name
_____	_____
	Title
_____	
Residence Address	

(c)

EXHIBIT A

2009 EQUITY INCENTIVE PLAN

EXERCISE NOTICE

Fluidigm Corporation
7000 Shoreline Court, Suite 100
South San Francisco, CA 94080

Attention: Stock Plan Administrator

1. Exercise of Option. Effective as of today, _____, _____, the undersigned ("Participant") hereby elects to exercise Participant's option (the "Option") to purchase _____ shares of the Common Stock (the "Shares") of Fluidigm Corporation (the "Company") under and pursuant to the 2009 Equity Incentive Plan (the "Plan") and the Stock Option Agreement dated _____, _____ (the "Option Agreement").

2. Delivery of Payment. Participant herewith delivers to the Company the full purchase price of the Shares, as set forth in the Option Agreement, and any and all withholding taxes due in connection with the exercise of the Option.

3. Representations of Participant. Participant acknowledges that Participant has received, read and understood the Plan and the Option Agreement and agrees to abide by and be bound by their terms and conditions.

4. Rights as Stockholder. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Common Stock subject to an Award, notwithstanding the exercise of the Option. The Shares shall be issued to Participant as soon as practicable after the Option is exercised in accordance with the Option Agreement. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance except as provided in Section 13 of the Plan.

5. Company's Right of First Refusal. Before any Shares held by Participant or any transferee (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section V (the "Right of First Refusal").

(a) Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the

(b)

Shares (the "Offered Price"), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

(b) Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection 3 below.

(c) Purchase Price. The purchase price ("Purchase Price") for the Shares purchased by the Company or its assignee(s) under this Section V shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

(d) Payment. Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within thirty (30) days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(e) Holder's Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section V, then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, provided that such sale or other transfer is consummated within one hundred and twenty (120) days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section V shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(f) Exception for Certain Family Transfers. Anything to the contrary contained in this Section V notwithstanding, the transfer of any or all of the Shares during the Participant's lifetime or on the Participant's death by will or intestacy to the Participant's immediate family or a trust for the benefit of the Participant's immediate family shall be exempt from the provisions of this Section V. "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section V, and there shall be no further transfer of such Shares except in accordance with the terms of this Section V.

(g) Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the earlier of (i) the first sale of Common Stock of the Company to the general public, or (ii) a Change in Control in which the successor corporation has equity securities that are publicly traded.

(b)

6. Tax Consultation. Participant understands that Participant may suffer adverse tax consequences as a result of Participant's purchase or disposition of the Shares. Participant represents that Participant has consulted with any tax consultants Participant deems advisable in connection with the purchase or disposition of the Shares and that Participant is not relying on the Company for any tax advice.

7. Restrictive Legends and Stop-Transfer Orders.

(a) Legends. Participant understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND A RIGHT OF FIRST REFUSAL HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE EXERCISE NOTICE BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER FOR A PERIOD OF TIME FOLLOWING THE EFFECTIVE DATE OF THE UNDERWRITTEN PUBLIC OFFERING OF THE COMPANY'S SECURITIES SET FORTH IN AN AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES AND MAY NOT BE SOLD OR OTHERWISE DISPOSED OF BY THE HOLDER PRIOR TO THE EXPIRATION OF SUCH PERIOD WITHOUT THE CONSENT OF THE COMPANY OR THE MANAGING UNDERWRITER.

(b) Stop-Transfer Notices. Participant agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(b)

(c) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Exercise Notice or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

8. Successors and Assigns. The Company may assign any of its rights under this Exercise Notice to single or multiple assignees, and this Exercise Notice shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Exercise Notice shall be binding upon Participant and his or her heirs, executors, administrators, successors and assigns.

9. Interpretation. Any dispute regarding the interpretation of this Exercise Notice shall be submitted by Participant or by the Company forthwith to the Administrator, which shall review such dispute at its next regular meeting. The resolution of such a dispute by the Administrator shall be final and binding on all parties.

10. Governing Law; Severability. This Exercise Notice is governed by the internal substantive laws, but not the choice of law rules, of California. In the event that any provision hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Exercise Notice shall continue in full force and effect.

11. Entire Agreement. The Plan and Option Agreement are incorporated herein by reference. This Exercise Notice, the Plan, the Restricted Stock Purchase Agreement, the Option Agreement and the Investment Representation Statement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant's interest except by means of a writing signed by the Company and Participant.

Submitted by: PARTICIPANT	Accepted by: FLUIDIGM CORPORATION
_____ Signature	_____ By
_____ Print Name	_____ Print Name
	_____ Title
Address:	Address:
_____	_____

(b)

Date Received

(c)

EXHIBIT B

INVESTMENT REPRESENTATION STATEMENT

PARTICIPANT :

COMPANY : FLUIDIGM CORPORATION

SECURITY : COMMON STOCK

AMOUNT :

DATE :

In connection with the purchase of the above-listed Securities, the undersigned Participant represents to the Company the following:

(a) Participant is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Participant is acquiring these Securities for investment for Participant's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Participant acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Participant's investment intent as expressed herein. In this connection, Participant understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Participant's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one (1) year or any other fixed period in the future. Participant further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Participant further acknowledges and understands that the Company is under no obligation to register the Securities. Participant understands that the certificate evidencing the Securities shall be imprinted with any legend required under applicable state securities laws.

(c) Participant is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Option to Participant, the exercise shall be exempt from registration under the Securities Act. In the event the Company becomes subject to the reporting requirements of

(b)

Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701 may be resold, subject to the satisfaction of the applicable conditions specified by Rule 144, including in the case of affiliates (1) the availability of certain public information about the Company, (2) the amount of Securities being sold during any three (3) month period not exceeding specified limitations, (3) the resale being made in an unsolicited "broker's transaction", transactions directly with a "market maker" or "riskless principal transactions" (as those terms are defined under the Securities Exchange Act of 1934) and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Option, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which may require (i) the availability of current public information about the Company; (ii) the resale to occur more than a specified period after the purchase and full payment (within the meaning of Rule 144) for the Securities; and (iii) in the case of the sale of Securities by an affiliate, the satisfaction of the conditions set forth in sections (2), (3) and (4) of the paragraph immediately above.

(d) Participant further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption shall be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 shall have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Participant understands that no assurances can be given that any such other registration exemption shall be available in such event.

PARTICIPANT

_____

Signature

_____

Print Name

_____

Date

(c)

EXHIBIT C-1

FLUIDIGM CORPORATION

2009 EQUITY INCENTIVE PLAN

RESTRICTED STOCK PURCHASE AGREEMENT

THIS RESTRICTED STOCK PURCHASE AGREEMENT (the "Agreement") is made between _____ (the "Purchaser") and Fluidigm Corporation (the "Company") or its assignees of rights hereunder as of _____, _____.

Unless otherwise defined herein, the terms defined in the 2009 Equity Incentive Plan shall have the same defined meanings in this Agreement.

RECITALS

A. Pursuant to the exercise of the option (grant number _____) granted to Purchaser under the Plan and pursuant to the Stock Option Agreement (the "Option Agreement") dated _____, _____ by and between the Company and Purchaser with respect to such grant (the "Option"), which Plan and Option Agreement are hereby incorporated by reference, Purchaser has elected to purchase _____ of those shares of Common Stock which have not become vested under the vesting schedule set forth in the Option Agreement ("Unvested Shares"). The Unvested Shares and the shares subject to the Option Agreement, which have become vested are sometimes collectively referred to herein as the "Shares."

B. As required by the Option Agreement, as a condition to Purchaser's election to exercise the option, Purchaser must execute this Agreement, which sets forth the rights and obligations of the parties with respect to Shares acquired upon exercise of the Option.

1. Repurchase Option.

(a) If Purchaser's status as a Service Provider is terminated for any reason, including for death and Disability, the Company shall have the right and option for ninety (90) days from such date to purchase from Purchaser, or Purchaser's personal representative, as the case may be, all of the Purchaser's Unvested Shares as of the date of such termination at the price paid by the Purchaser for such Shares (the "Repurchase Option").

(b) Upon the occurrence of such termination, the Company may exercise its Repurchase Option by delivering personally or by registered mail, to Purchaser (or his or her transferee or legal representative, as the case may be) with a copy to the escrow agent described in Section 2 below, a notice in writing indicating the Company's intention to exercise the Repurchase Option AND, at the Company's option, (i) by delivering to the Purchaser (or the Purchaser's transferee or legal representative) a check in the amount of the aggregate repurchase price, or (ii) by the Company canceling an amount of the Purchaser's indebtedness to the Company equal to the

(b)

aggregate repurchase price, or (iii) by a combination of (i) and (ii) so that the combined payment and cancellation of indebtedness equals such aggregate repurchase price. Upon delivery of such notice and payment of the aggregate repurchase price in any of the ways described above, the Company shall become the legal and beneficial owner of the Unvested Shares being repurchased and the rights and interests therein or relating thereto, and the Company shall have the right to retain and transfer to its own name the number of Unvested Shares being repurchased by the Company.

(c) Whenever the Company shall have the right to repurchase Unvested Shares hereunder, the Company may designate and assign one or more employees, officers, directors or stockholders of the Company or other persons or organizations to exercise all or a part of the Company's Repurchase Option under this Agreement and purchase all or a part of such Unvested Shares.

(d) If the Company does not elect to exercise the Repurchase Option conferred above by giving the requisite notice within ninety (90) days following the termination, the Repurchase Option shall terminate.

(e) The Repurchase Option shall terminate in accordance with the vesting schedule contained in Purchaser's Option Agreement.

2. Transferability of the Shares; Escrow.

(a) Purchaser hereby authorizes and directs the Secretary of the Company, or such other person designated by the Company, to transfer the Unvested Shares as to which the Repurchase Option has been exercised from Purchaser to the Company.

(b) To insure the availability for delivery of Purchaser's Unvested Shares upon repurchase by the Company pursuant to the Repurchase Option under Section 1, Purchaser hereby appoints the Secretary, or any other person designated by the Company as escrow agent (the "Escrow Agent"), as its attorney-in-fact to sell, assign and transfer unto the Company, such Unvested Shares, if any, repurchased by the Company pursuant to the Repurchase Option and shall, upon execution of this Agreement, deliver and deposit with the Escrow Agent, the share certificates representing the Unvested Shares, together with the stock assignment duly endorsed in blank, attached hereto as Exhibit C-2. The Unvested Shares and stock assignment shall be held by the Escrow Agent in escrow, pursuant to the Joint Escrow Instructions of the Company and Purchaser attached as Exhibit C-3 hereto, until the Company exercises its Repurchase Option, until such Unvested Shares are vested, or until such time as this Agreement no longer is in effect. Upon vesting of the Unvested Shares, the Escrow Agent shall promptly deliver to the Purchaser the certificate or certificates representing such Shares in the Escrow Agent's possession belonging to the Purchaser, and the Escrow Agent shall be discharged of all further obligations hereunder; provided, however, that the Escrow Agent shall nevertheless retain such certificate or certificates as Escrow Agent if so required pursuant to other restrictions imposed pursuant to this Agreement.

(c) Neither the Company nor the Escrow Agent shall be liable for any act it may do or omit to do with respect to holding the Shares in escrow and while acting in good faith and in the exercise of its judgment.

(b)

(d) Transfer or sale of the Shares is subject to restrictions on transfer imposed by any applicable state and federal securities laws. Any transferee shall hold such Shares subject to all the provisions hereof and the Exercise Notice executed by the Purchaser with respect to any Unvested Shares purchased by Purchaser and shall acknowledge the same by signing a copy of this Agreement.

3. Ownership, Voting Rights, Duties. This Agreement shall not affect in any way the ownership, voting rights or other rights or duties of Purchaser, except as specifically provided herein.

4. Legends. The share certificate evidencing the Shares issued hereunder shall be endorsed with the following legend (in addition to any legend required under applicable federal and state securities laws):

> THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS UPON TRANSFER AND RIGHTS OF REPURCHASE AS SET FORTH IN AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

5. Adjustment for Stock Split. All references to the number of Shares and the purchase price of the Shares in this Agreement shall be appropriately adjusted to reflect any stock split, stock dividend or other change in the Shares, which may be made by the Company pursuant to Section 13 of the Plan after the date of this Agreement.

6. Notices. Notices required hereunder shall be given in person or by registered mail to the address of Purchaser shown on the records of the Company, and to the Company at their respective principal executive offices.

7. Survival of Terms. This Agreement shall apply to and bind Purchaser and the Company and their respective permitted assignees and transferees, heirs, legatees, executors, administrators and legal successors.

8. Section 83(b) Election. Purchaser hereby acknowledges that he or she has been informed that, with respect to the exercise of an Option for Unvested Shares, an election (the "Election") may be filed by the Purchaser with the Internal Revenue Service, within thirty (30) days of the purchase of the exercised Shares, electing pursuant to Section 83(b) of the Code to be taxed currently on any difference between the purchase price of the exercised Shares and their Fair Market Value on the date of purchase. In the case of a Nonstatutory Stock Option, this will result in the recognition of taxable income to the Purchaser on the date of exercise, measured by the excess, if any, of the Fair Market Value of the exercised Shares, at the time the Option is exercised over the purchase price for the exercised Shares. Absent such an Election, taxable income will be measured and recognized by Purchaser at the time or times on which the Company's Repurchase Option lapses. In the case of an Incentive Stock Option, such an Election will result in a recognition of income to the Purchaser for alternative minimum tax purposes on the date of exercise, measured by the excess, if any, of the Fair Market Value of the exercised Shares, at the time the option is exercised, over the purchase price for the exercised Shares. Absent such an Election, alternative

(b)

minimum taxable income will be measured and recognized by Purchaser at the time or times on which the Company's Repurchase Option lapses.

This discussion is intended only as a summary of the general United States income tax laws that apply to exercising Options as to Shares that have not yet vested and is accurate only as of the date this form Agreement was approved by the Board. The federal, state and local tax consequences to any particular taxpayer will depend upon his or her individual circumstances. Purchaser is strongly encouraged to seek the advice of his or her own tax consultants in connection with the purchase of the Shares and the advisability of filing of the Election under Section 83(b) of the Code. A form of Election under Section 83(b) is attached hereto as Exhibit C-4 for reference.

PURCHASER ACKNOWLEDGES THAT IT IS PURCHASER'S SOLE RESPONSIBILITY AND NOT THE COMPANY'S TO FILE TIMELY THE ELECTION UNDER SECTION 83(b) OF THE CODE, EVEN IF PURCHASER REQUESTS THE COMPANY OR ITS REPRESENTATIVE TO MAKE THIS FILING ON PURCHASER'S BEHALF.

9. Representations. Purchaser has reviewed with his or her own tax advisors the federal, state, local and foreign tax consequences of this investment and the transactions contemplated by this Agreement. Purchaser is relying solely on such advisors and not on any statements or representations of the Company or any of its agents. Purchaser understands that he or she (and not the Company) shall be responsible for his or her own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

10. Entire Agreement; Governing Law. The Plan and Option Agreement are incorporated herein by reference. The Plan, the Option Agreement, the Exercise Notice, this Agreement, and the Investment Representation Statement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Purchaser with respect to the subject matter hereof, and may not be modified adversely to the Purchaser's interest except by means of a writing signed by the Company and Purchaser. This Agreement is governed by the internal substantive laws but not the choice of law rules of California.

Purchaser represents that he or she has read this Agreement and is familiar with its terms and provisions. Purchaser hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Board upon any questions arising under this Agreement.

(b)

IN WITNESS WHEREOF, this Agreement is deemed made as of the date first set forth above.

PARTICIPANT	FLUIDIGM CORPORATION
_____	_____
Signature	By
_____	_____
Print Name	Print Name
_____	_____
	Title
_____	
Residence Address	

Dated: _____ , _____

(b)

EXHIBIT C-2

ASSIGNMENT SEPARATE FROM CERTIFICATE

FOR VALUE RECEIVED I, _____, hereby sell, assign and transfer unto Fluidigm Corporation _____ shares of the Common Stock of Fluidigm Corporation standing in my name of the books of said corporation represented by Certificate No. _____ herewith and do hereby irrevocably constitute and appoint _____ to transfer the said stock on the books of the within named corporation with full power of substitution in the premises.

This Stock Assignment may be used only in accordance with the Restricted Stock Purchase Agreement between Fluidigm Corporation and the undersigned dated _____, _____ (the "Agreement").

Dated: _____, _____ Signature: _____

INSTRUCTIONS: Please do not fill in any blanks other than the signature line. The purpose of this assignment is to enable the Company to exercise its "repurchase option," as set forth in the Agreement, without requiring additional signatures on the part of the Purchaser.

(c)

EXHIBIT C-3

JOINT ESCROW INSTRUCTIONS

_____, ____

Corporate Secretary
Fluidigm Corporation
7000 Shoreline Court, Suite 100
South San Francisco, CA 94080

Dear _____:

As Escrow Agent for both Fluidigm Corporation (the "Company"), and the undersigned purchaser of stock of the Company (the "Purchaser"), you are hereby authorized and directed to hold the documents delivered to you pursuant to the terms of that certain Restricted Stock Purchase Agreement (the "Agreement") between the Company and the undersigned, in accordance with the following instructions:

1. In the event the Company and/or any assignee of the Company (referred to collectively for convenience herein as the "Company") exercises the Company's repurchase option set forth in the Agreement, the Company shall give to Purchaser and you a written notice specifying the number of shares of stock to be purchased, the purchase price, and the time for a closing hereunder at the principal office of the Company. Purchaser and the Company hereby irrevocably authorize and direct you to close the transaction contemplated by such notice in accordance with the terms of said notice.

2. At the closing, you are directed (a) to date the stock assignments necessary for the transfer in question, (b) to fill in the number of shares being transferred, and (c) to deliver the stock assignments, together with the certificate evidencing the shares of stock to be transferred, to the Company or its assignee, against the simultaneous delivery to you of the purchase price (by cash, a check, or some combination thereof) for the number of shares of stock being purchased pursuant to the exercise of the Company's repurchase option.

3. Purchaser irrevocably authorizes the Company to deposit with you any certificates evidencing shares of stock to be held by you hereunder and any additions and substitutions to said shares as defined in the Agreement. Purchaser does hereby irrevocably constitute and appoint you as Purchaser's attorney-in-fact and agent for the term of this escrow to execute with respect to such securities all documents necessary or appropriate to make such securities negotiable and to complete any transaction herein contemplated, including but not limited to the filing with any applicable state blue sky authority of any required applications for consent to, or notice of transfer of, the securities. Subject to the provisions of this paragraph 3, Purchaser shall exercise all rights and privileges of a stockholder of the Company while the stock is held by you.

4. Upon written request of the Purchaser, but no more than once per calendar year, unless the Company's repurchase option has been exercised, you shall deliver to Purchaser a

(b)

certificate or certificates representing so many shares of stock as are not then subject to the Company's repurchase option. Within one hundred and twenty (120) days after cessation of Purchaser's continuous employment by or services to the Company, or any parent or subsidiary of the Company, you shall deliver to Purchaser a certificate or certificates representing the aggregate number of shares held or issued pursuant to the Agreement and not purchased by the Company or its assignees pursuant to exercise of the Company's repurchase option.

5. If at the time of termination of this escrow you should have in your possession any documents, securities, or other property belonging to Purchaser, you shall deliver all of the same to Purchaser and shall be discharged of all further obligations hereunder.

6. Your duties hereunder may be altered, amended, modified or revoked only by a writing signed by all of the parties hereto.

7. You shall be obligated only for the performance of such duties as are specifically set forth herein and may rely and shall be protected in relying or refraining from acting on any instrument reasonably believed by you to be genuine and to have been signed or presented by the proper party or parties. You shall not be personally liable for any act you may do or omit to do hereunder as Escrow Agent or as attorney-in-fact for Purchaser while acting in good faith, and any act done or omitted by you pursuant to the advice of your own attorneys shall be conclusive evidence of such good faith.

8. You are hereby expressly authorized to disregard any and all warnings given by any of the parties hereto or by any other person or corporation, excepting only orders or process of courts of law and are hereby expressly authorized to comply with and obey orders, judgments or decrees of any court. In case you obey or comply with any such order, judgment or decree, you shall not be liable to any of the parties hereto or to any other person, firm or corporation by reason of such compliance, notwithstanding any such order, judgment or decree being subsequently reversed, modified, annulled, set aside, vacated or found to have been entered without jurisdiction.

9. You shall not be liable in any respect on account of the identity, authorities or rights of the parties executing or delivering or purporting to execute or deliver the Agreement or any documents or papers deposited or called for hereunder.

10. You shall not be liable for the outlawing of any rights under the Statute of Limitations with respect to these Joint Escrow Instructions or any documents deposited with you.

11. You shall be entitled to employ such legal counsel and other experts as you may deem necessary properly to advise you in connection with your obligations hereunder, may rely upon the advice of such counsel, and may pay such counsel reasonable compensation therefor.

12. Your responsibilities as Escrow Agent hereunder shall terminate if you shall cease to be an officer or agent of the Company or if you shall resign by written notice to each party. In the event of any such termination, the Company shall appoint a successor Escrow Agent.

(b)

13. If you reasonably require other or further instruments in connection with these Joint Escrow Instructions or obligations in respect hereto, the necessary parties hereto shall join in furnishing such instruments.

14. It is understood and agreed that should any dispute arise with respect to the delivery and/or ownership or right of possession of the securities held by you hereunder, you are authorized and directed to retain in your possession without liability to anyone all or any part of said securities until such disputes shall have been settled either by mutual written agreement of the parties concerned or by a final order, decree or judgment of a court of competent jurisdiction after the time for appeal has expired and no appeal has been perfected, but you shall be under no duty whatsoever to institute or defend any such proceedings.

15. Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery or upon deposit in the United States Post Office, by registered or certified mail with postage and fees prepaid, addressed to each of the other parties thereunto entitled at the following addresses or at such other addresses as a party may designate by ten (10) days' advance written notice to each of the other parties hereto.

16. By signing these Joint Escrow Instructions, you become a party hereto only for the purpose of said Joint Escrow Instructions; you do not become a party to the Agreement.

17. This instrument shall be binding upon and inure to the benefit of the parties hereto, and their respective successors and permitted assigns.

18. These Joint Escrow Instructions shall be governed by the internal substantive laws, but not the choice of law rules, of California.

PURCHASER

Signature

Print Name

Residence Address

FLUIDIGM CORPORATION

By

Print Name

Title

(b)

ESCROW AGENT

_____

Corporate Secretary

Dated: _____

(c)

EXHIBIT C-4

ELECTION UNDER SECTION 83(b)
OF THE INTERNAL REVENUE CODE OF 1986

The undersigned taxpayer hereby elects, pursuant to Sections 55 and 83(b) of the Internal Revenue Code of 1986, as amended, to include in taxpayer's gross income or alternative minimum taxable income, as the case may be, for the current taxable year the amount of any compensation taxable to taxpayer in connection with taxpayer's receipt of the property described below.

1. The name, address, taxpayer identification number and taxable year of the undersigned are as follows:

	TAXPAYER	SPOUSE
NAME:	_____	_____
ADDRESS:	_____	_____
	_____	_____
TAX ID NO.:	_____	_____
TAXABLE YEAR:	_____	

2. The property with respect to which the election is made is described as follows: _____ shares (the "Shares") of the Common Stock of Fluidigm Corporation (the "Company").

3. The date on which the property was transferred is: _____, _____.

4. The property is subject to the following restrictions:

   The Shares may not be transferred and are subject to forfeiture under the terms of an agreement between the taxpayer and the Company. These restrictions lapse upon the satisfaction of certain conditions contained in such agreement.

5. The Fair Market Value at the time of transfer, determined without regard to any restriction other than a restriction which by its terms shall never lapse, of such property is: $_____.

6. The amount (if any) paid for such property is: $_____.

The undersigned has submitted a copy of this statement to the person for whom the services were performed in connection with the undersigned's receipt of the above-described property. The transferee of such property is the person performing the services in connection with the transfer of said property.

The undersigned understands that the foregoing election may not be revoked except with the consent of the Commissioner.

Dated: _____, _____

_____
Taxpayer

The undersigned spouse of taxpayer joins in this election.

(b)

Dated: _____, _____

_____
Spouse of Taxpayer

(c)

FLUIDIGM CORPORATION

2009 EQUITY INCENTIVE PLAN

RESTRICTED STOCK PURCHASE AGREEMENT

Unless otherwise defined herein, the terms defined in the 2009 Equity Incentive Plan (the "Plan") shall have the same defined meanings in this Restricted Stock Purchase Agreement (the "Agreement").

1. NOTICE OF GRANT OF RESTRICTED STOCK

Name:

Address:

The undersigned Participant has been granted a right to purchase Common Stock of the Company, subject to the terms and conditions of the Plan and this Agreement, as follows:

Date of Grant:	_____
Vesting Commencement Date:	_____
Purchase Price per Share:	$ _____
Total Number of Shares Granted:	_____
Total Purchase Price:	$ _____
Expiration Date:	[30 days after Date of Grant]

Vesting Schedule:

Subject to any accelerated vesting provisions in the Plan, **[**Vesting Schedule]

Any of the Shares which have not yet been released from the Company's Repurchase Option are referred to herein as "Unreleased Shares." The Shares which have been released from the Company's Repurchase Option shall be delivered to Participant at Participant's request (see Section (k) of Part 0 of this Agreement).

YOU MUST EXERCISE THIS RESTRICTED STOCK AWARD BEFORE THE EXPIRATION DATE OR IT WILL TERMINATE AND YOU WILL HAVE NO FURTHER RIGHT TO PURCHASE THE SHARES.

(b)

2. AGREEMENT

(a) Sale of Stock. The Administrator of the Company hereby agrees to sell to the Participant named in the Notice of Grant of Restricted Stock in Part 1 of this Agreement ("Participant"), and Participant hereby agrees to purchase the number of Shares set forth in the Notice of Grant of Restricted Stock, at the Purchase Price per Share set forth in the Notice of Grant of Restricted Stock (the "Purchase Price"), and subject to the terms and conditions of the Plan, which is incorporated herein by reference. Subject to Section 18(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and this Agreement, the terms and conditions of the Plan shall prevail.

(b) Payment of Purchase Price. Participant herewith delivers to the Company the aggregate Purchase Price for the Shares by cash or check, together with any and all withholding taxes due in connection with the purchase of the Shares.

(c) Participant's Representations. In the event the Shares have not been registered under the Securities Act of 1933, as amended, at the time this Restricted Stock Award is exercised, Participant shall, if required by the Company, concurrently with the exercise of all or any portion of this Restricted Stock Award, deliver to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit A.

(d) Lock-Up Period. Participant hereby agrees that Participant shall not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any Common Stock (or other securities) of the Company or enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Common Stock (or other securities) of the Company held by Participant (other than those included in the registration) for a period specified by the representative of the underwriters of Common Stock (or other securities) of the Company not to exceed one hundred and eighty (180) days following the effective date of any registration statement of the Company filed under the Securities Act (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto).

Participant agrees to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriter which are consistent with the foregoing or which are necessary to give further effect thereto. In addition, if requested by the Company or the representative of the underwriters of Common Stock (or other securities) of the Company, Participant shall provide, within ten (10) days of such request, such information as may be required by the Company or such representative in connection with the completion of any public offering of the Company's securities pursuant to a registration statement filed under the Securities Act. The obligations described in this Section (d) shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a Commission Rule 145 transaction on Form S-4 or similar forms that

(b)

may be promulgated in the future. The Company may impose stop-transfer instructions with respect to the shares of Common Stock (or other securities) subject to the foregoing restriction until the end of said one hundred and eighty (180) day (or other) period. Participant agrees that any transferee of the Restricted Stock Award or shares acquired pursuant to the Restricted Stock Award shall be bound by this Section (d).

(e) Non-Transferability of Restricted Stock. This Restricted Stock Award may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Participant only by Participant. The terms of the Plan and this Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of Participant.

(f) Tax Consequences. Participant has reviewed with Participant's own tax advisors the federal, state, local and foreign tax consequences of this investment and the transactions contemplated by this Agreement. Participant is relying solely on such advisors and not on any statements or representations of the Company or any of its agents. Participant understands that Participant (and not the Company) shall be responsible for Participant's own tax liability that may arise as a result of the transactions contemplated by this Agreement. Participant understands that Section 83 of the Internal Revenue Code of 1986, as amended (the "Code"), taxes as ordinary income the difference between the purchase price for the Shares and the Fair Market Value of the Shares as of the date any restrictions on the Shares lapse. In this context, "restriction" includes the right of the Company to buy back the Shares pursuant to the Repurchase Option. Participant understands that Participant may elect to be taxed at the time the Shares are purchased rather than when and as the Repurchase Option expires by filing an election under Section 83(b) of the Code with the IRS within thirty (30) days from the date of purchase. The form for making this election is attached as Exhibit B-3 hereto.

THE PARTICIPANT ACKNOWLEDGES THAT IT IS THE PARTICIPANT'S SOLE RESPONSIBILITY AND NOT THE COMPANY'S TO FILE TIMELY THE ELECTION UNDER SECTION 83(b), EVEN IF THE PARTICIPANT REQUESTS THE COMPANY OR ITS REPRESENTATIVES TO MAKE THIS FILING ON THE PARTICIPANT'S BEHALF.

(g) Tax Withholding. Pursuant to such procedures as the Administrator may specify from time to time, the Company shall withhold the minimum amount required to be withheld for the payment of income, employment and other taxes which the Company determines must be withheld (the "Withholding Taxes") with respect to Shares released from the Company's Repurchase Option by, in the Administrator's discretion: (i) withholding otherwise deliverable Shares upon release from the Company's Repurchase Option having a Fair Market Value equal the amount of such Withholding Taxes, (ii) withholding the amount of such Withholding Taxes from Participant's paycheck(s), (iii) requiring Participant to make appropriate arrangements with the Company (or the Parent or Subsidiary employing or retaining Participant) for the satisfaction of all Withholding Taxes, or (iv) a combination of the foregoing. The Company shall not retain fractional Shares to satisfy any portion of the Withholding Taxes. Accordingly, if any withholding is done through the withholding of Shares, Participant shall pay to the Company an amount in cash sufficient to satisfy the remaining Withholding Taxes due and payable as a result of the Company not retaining fractional Shares. Should the Company be unable to procure such cash amounts from Participant, Participant

(b)

agrees and acknowledges that Participant is giving the Company permission to withhold from Participant's paycheck(s) an amount equal to the remaining Withholding Taxes due and payable as a result of the Company not retaining fractional Shares. Participant acknowledges and agrees that the Company may refuse to honor the exercise and refuse to deliver the Shares if such withholding amounts are not delivered at the time of purchase.

(h) No Guarantee of Continued Service. PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE RELEASE OF SHARES FROM THE REPURCHASE OPTION OF THE COMPANY PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) AND NOT THROUGH THE ACT OF BEING HIRED OR PURCHASING SHARES HEREUNDER. PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH PARTICIPANT'S RIGHT OR THE RIGHT OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) TO TERMINATE PARTICIPANT'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

(i) Repurchase Option.

(i) In the event Participant's continuous status as a Service Provider terminates for any or no reason (including death or Disability), the Company shall, upon the date of such termination (as reasonably fixed and determined by the Company), have an irrevocable, exclusive option for a period of ninety (90) days from such date to repurchase up to that number of Shares which constitute the Unreleased Shares (as defined in Part 1 of this Agreement) at the Purchase Price per share (the "Repurchase Price") (the "Repurchase Option").

(ii) The Repurchase Option shall be exercised by the Company by delivering written notice to Participant or Participant's executor (with a copy to the Escrow Holder (as defined in Section (k))) AND, at the Company's option, (i) by delivering to Participant or Participant's executor a check in the amount of the aggregate Repurchase Price, or (ii) by the Company canceling an amount of Participant's indebtedness to the Company equal to the aggregate Repurchase Price, or (iii) by a combination of (i) and (ii) so that the combined payment and cancellation of indebtedness equals such aggregate Repurchase Price. Upon delivery of such notice and the payment of the aggregate Repurchase Price in any of the ways described above, the Company shall become the legal and beneficial owner of the Unreleased Shares being repurchased and all rights and interests therein or relating thereto, and the Company shall have the right to retain and transfer to its own name the number of Unreleased Shares being repurchased by the Company.

(iii) Whenever the Company shall have the right to repurchase the Unreleased Shares hereunder, the Company may designate and assign one or more employees, officers, directors or shareholders of the Company or other persons or organizations to exercise all or a part of the

(b)

Company's Repurchase Option to purchase all or a part of the Unreleased Shares. If the Fair Market Value of the Unreleased Shares to be repurchased on the date of such designation or assignment (the "Repurchase FMV") exceeds the aggregate Repurchase Price of the Unreleased Shares, then each such designee or assignee shall pay the Company cash equal to the difference between the Repurchase FMV and the aggregate Repurchase Price of Unreleased Shares to be purchased.

(iv) If the Company or its assignee does not elect to exercise the Repurchase Option conferred above by giving the requisite notice within ninety (90) days following Participant's termination as a Service Provider, the Repurchase Option shall terminate.

(j) Restriction on Transfer. Except for the escrow described in Section (k) or transfer of the Shares to the Company or its assignees contemplated by this Agreement, none of the Shares or any beneficial interest therein shall be transferred, encumbered or otherwise disposed of in any way until the release of such Shares from the Company's Repurchase Option in accordance with the provisions of this Agreement, other than by will or the laws of descent and distribution. Any distribution or delivery to be made to Participant under this Agreement shall, if Participant is then deceased, be made to Participant's designated beneficiary, or if no beneficiary survives Participant, to the administrator or executor of Participant's estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.

(k) Escrow of Shares.

(i) To ensure the availability for delivery of Participant's Unreleased Shares upon exercise of the Repurchase Option by the Company, Participant will, upon execution of this Agreement, deliver and deposit with an escrow holder designated by the Company (the "Escrow Holder") the share certificates representing the Unreleased Shares, together with the Assignment Separate from Certificate (the "Stock Assignment") duly endorsed in blank, attached hereto as Exhibit B-1. The Unreleased Shares and Stock Assignment shall be held by the Escrow Holder, pursuant to the Joint Escrow Instructions of the Company and Participant attached as Exhibit B-2 hereto, until such time as the Company's Repurchase Option expires.

(ii) The Escrow Holder shall not be liable for any act it may do or omit to do with respect to holding the Unreleased Shares in escrow and while acting in good faith and in the exercise of its judgment.

(iii) If the Company or any assignee exercises its Repurchase Option hereunder, the Escrow Holder, upon receipt of written notice of such option exercise from the proposed transferee, shall take all steps necessary to accomplish such transfer. Participant hereby appoints the Escrow Holder with full power of substitution, as Participant's true and lawful attorney-in-fact with irrevocable power and authority in the name and on behalf of Participant to take any action and execute all documents and instruments, including, without limitation, stock powers which may be necessary to transfer the certificate or certificates evidencing such Unreleased Shares to the Company upon such termination.

(b)

(iv) When the Repurchase Option has been exercised or expires unexercised or a portion of the Shares has been released from such Repurchase Option, upon Participant's request the Escrow Holder shall promptly cause a new certificate to be issued for such released Shares and shall deliver such certificate to the Company or Participant, as the case may be.

(v) Subject to the terms hereof, Participant shall have all the rights of a shareholder with respect to such Shares while they are held in escrow, including without limitation, the right to vote the Shares and receive any cash dividends declared thereon.

(vi) In the event of any merger, reorganization, consolidation, recapitalization, separation, liquidation, stock dividend, split-up, share combination, or other change in the corporate structure of the Company affecting the Common Stock, the Shares shall be increased, reduced or otherwise changed, and by virtue of any such change Participant shall in his or her capacity as owner of Unreleased Shares that have been awarded to him or her be entitled to new or additional or different shares of stock, cash or securities (other than rights or warrants to purchase securities); such new or additional or different shares, cash or securities shall thereupon be considered to be "Unreleased Shares" and shall be subject to all of the conditions and restrictions which were applicable to the Unreleased Shares pursuant to this Agreement. If Participant receives rights or warrants with respect to any Unreleased Shares, such rights or warrants may be held or exercised by Participant, provided that until such exercise any such rights or warrants and after such exercise any shares or other securities acquired by the exercise of such rights or warrants shall be considered to be Unreleased Shares and shall be subject to all of the conditions and restrictions which were applicable to the Unreleased Shares pursuant to this Agreement. The Administrator in its absolute discretion at any time may accelerate the vesting of all or any portion of such new or additional shares of stock, cash or securities, rights or warrants to purchase securities or shares or other securities acquired by the exercise of such rights or warrants.

(l) Company's Right of First Refusal. Subject to Section (j), before any Shares held by Participant or any transferee (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section (l) (the "Right of First Refusal").

(i) Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares (the "Offered Price"), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

(ii) Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection (iii) below.

(b)

(iii) Purchase Price. The purchase price ("Right of First Refusal Price") for the Shares purchased by the Company or its assignee(s) under this Section (l) shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board in good faith.

(iv) Payment. Payment of the Right of First Refusal Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within thirty (30) days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(v) Holder's Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section (l), then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, provided that such sale or other transfer is consummated within one hundred and twenty (120) days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section (l) shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(vi) Exception for Certain Family Transfers. Anything to the contrary contained in this Section (l) notwithstanding, the transfer of any or all of the Shares during Participant's lifetime or on Participant's death by will or intestacy to Participant's immediate family or a trust for the benefit of Participant's immediate family shall be exempt from the provisions of this Section (l). "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Agreement, including but not limited to this Section (l) and Section (i), and there shall be no further transfer of such Shares except in accordance with the terms of this Section (l).

(vii) Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the earlier of (i) the first sale of Common Stock of the Company to the general public, or (ii) a Change in Control in which the successor corporation has equity securities that are publicly traded.

(m) Restrictive Legends and Stop-Transfer Orders.

(i) Legends. Participant understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

(b)

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER, A RIGHT OF FIRST REFUSAL, AND A REPURCHASE OPTION HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE RESTRICTED STOCK PURCHASE AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS, RIGHT OF FIRST REFUSAL AND REPURCHASE OPTION ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER FOR A PERIOD OF TIME FOLLOWING THE EFFECTIVE DATE OF THE UNDERWRITTEN PUBLIC OFFERING OF THE COMPANY'S SECURITIES SET FORTH IN AN AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES AND MAY NOT BE SOLD OR OTHERWISE DISPOSED OF BY THE HOLDER PRIOR TO THE EXPIRATION OF SUCH PERIOD WITHOUT THE CONSENT OF THE COMPANY OR THE MANAGING UNDERWRITER.

(ii) Stop-Transfer Notices. Participant agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(iii) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

(n) Notices. Any notice, demand or request required or permitted to be given by either the Company or Participant pursuant to the terms of this Agreement shall be in writing and shall be deemed given when delivered personally or deposited in the U.S. mail, First Class with postage prepaid, and addressed to the parties at the addresses of the parties set forth at the end of this Agreement or such other address as a party may request by notifying the other in writing.

Any notice to the Escrow Holder shall be sent to the Company's address with a copy to the other party not sending the notice.

(b)

(o) No Waiver. Either party's failure to enforce any provision or provisions of this Agreement shall not in any way be construed as a waiver of any such provision or provisions, nor prevent that party from thereafter enforcing each and every other provision of this Agreement. The rights granted both parties herein are cumulative and shall not constitute a waiver of either party's right to assert all other legal remedies available to it under the circumstances.

(p) Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Agreement shall be binding upon Participant and his or her heirs, executors, administrators, successors and assigns. The rights and obligations of Participant under this Agreement may only be assigned with the prior written consent of the Company.

(q) Interpretation. Any dispute regarding the interpretation of this Agreement shall be submitted by Participant or by the Company forthwith to the Administrator, which shall review such dispute at its next regular meeting. The resolution of such a dispute by the Administrator shall be final and binding on all parties.

(r) Additional Documents. Participant agrees upon request to execute any further documents or instruments necessary or desirable to carry out the purposes or intent of this Agreement.

(s) Governing Law; Severability. This Agreement is governed by the internal substantive laws, but not the choice of law rules, of California. In the event that any provision hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect.

(t) Entire Agreement. The Plan is incorporated herein by reference. The Plan and this Agreement (including the exhibits referenced herein) constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant's interest except by means of a writing signed by the Company and Participant.

(b)

Participant acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Agreement subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of this Agreement. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Agreement. Participant further agrees to notify the Company upon any change in the residence address indicated below.

PARTICIPANT	FLUIDIGM CORPORATION
Signature	By
Print Name	Print Name
	Title
Residence Address	

(b)

EXHIBIT A

INVESTMENT REPRESENTATION STATEMENT

PARTICIPANT :

COMPANY : FLUIDIGM CORPORATION

SECURITY : COMMON STOCK

AMOUNT :

DATE :

In connection with the purchase of the above-listed Securities, the undersigned Participant represents to the Company the following:

1. Participant is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Participant is acquiring these Securities for investment for Participant's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

2. Participant acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Participant's investment intent as expressed herein. In this connection, Participant understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Participant's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one year or any other fixed period in the future. Participant further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Participant further acknowledges and understands that the Company is under no obligation to register the Securities. Participant understands that the certificate evidencing the Securities shall be imprinted with any legend required under applicable state securities laws.

3. Participant is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Restricted Stock Award to Participant, the exercise shall be exempt from registration under the Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities

(b)

exempt under Rule 701 may be resold, subject to the satisfaction of the applicable conditions specified by Rule 144, including in the case of affiliates (1) the availability of certain public information about the Company, (2) the amount of Securities being sold during any three (3) month period not exceeding specified limitations, (3) the resale being made in an unsolicited "broker's transaction", transactions directly with a "market maker" or "riskless principal transactions" (as those terms are defined under the Securities Exchange Act of 1934) and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Restricted Stock Award, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which may require (i) the availability of current public information about the Company; (ii) the resale to occur more than a specified period after the purchase and full payment (within the meaning of Rule 144) for the Securities; and (iii) in the case of the sale of Securities by an affiliate, the satisfaction of the conditions set forth in sections (2), (3) and (4) of the paragraph immediately above.

4. Participant further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption shall be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 shall have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Participant understands that no assurances can be given that any such other registration exemption shall be available in such event.

PARTICIPANT

_____

Signature

_____

Print Name

_____

Date

(b)

EXHIBIT B-1

ASSIGNMENT SEPARATE FROM CERTIFICATE

FOR VALUE RECEIVED I, _____, hereby sell, assign and transfer unto Fluidigm Corporation _____ shares of the Common Stock of Fluidigm Corporation standing in my name on the books of said corporation represented by Certificate No. ____ herewith and do hereby irrevocably constitute and appoint _____ to transfer the said stock on the books of the within named corporation with full power of substitution in the premises.

This Stock Assignment may be used only in accordance with the Restricted Stock Purchase Agreement between Fluidigm Corporation and the undersigned dated _____, _____ (the "Agreement").

Dated: _____, _____ Signature: _____

INSTRUCTIONS: Please do not fill in any blanks other than the signature line. The purpose of this assignment is to enable the Company to exercise its "repurchase option," as set forth in the Agreement, without requiring additional signatures on the part of the Participant.

(d)

EXHIBIT B-2

JOINT ESCROW INSTRUCTIONS

_____, ____

Corporate Secretary
7000 Shoreline Court, Suite 100
South San Francisco, CA 94080

Dear _____:

As Escrow Agent for both Fluidigm Corporation (the "Company"), and the undersigned purchaser of stock of the Company (the "Participant"), you are hereby authorized and directed to hold the documents delivered to you pursuant to the terms of that certain Restricted Stock Purchase Agreement (the "Agreement") between the Company and the undersigned, in accordance with the following instructions:

1. In the event the Company and/or any assignee of the Company (referred to collectively for convenience herein as the "Company") exercises the Company's repurchase option set forth in the Agreement, the Company shall give to Participant and you a written notice specifying the number of shares of stock to be purchased, the purchase price, and the time for a closing hereunder at the principal office of the Company. Participant and the Company hereby irrevocably authorize and direct you to close the transaction contemplated by such notice in accordance with the terms of said notice.

2. At the closing, you are directed (a) to date the stock assignments necessary for the transfer in question, (b) to fill in the number of shares being transferred, and (c) to deliver the stock assignments, together with the certificate evidencing the shares of stock to be transferred, to the Company or its assignee, against the simultaneous delivery to you of the purchase price (by cash, a check, or some combination thereof) for the number of shares of stock being purchased pursuant to the exercise of the Company's repurchase option.

3. Participant irrevocably authorizes the Company to deposit with you any certificates evidencing shares of stock to be held by you hereunder and any additions and substitutions to said shares as defined in the Agreement. Participant does hereby irrevocably constitute and appoint you as Participant's attorney-in-fact and agent for the term of this escrow to execute with respect to such securities all documents necessary or appropriate to make such securities negotiable and to complete any transaction herein contemplated, including but not limited to the filing with any applicable state blue sky authority of any required applications for consent to, or notice of transfer of, the securities. Subject to the provisions of this paragraph 3, Participant shall exercise all rights and privileges of a stockholder of the Company while the stock is held by you.

4. Upon written request of the Participant, but no more than once per calendar year, unless the Company's repurchase option has been exercised, you shall deliver to Participant a certificate or certificates representing so many shares of stock as are not then subject to the Company's repurchase option. Within one hundred and twenty (120) days after cessation of

(b)

Participant's continuous employment by or services to the Company, or any parent or subsidiary of the Company, you shall deliver to Participant a certificate or certificates representing the aggregate number of shares held or issued pursuant to the Agreement and not purchased by the Company or its assignees pursuant to exercise of the Company's repurchase option.

5. If at the time of termination of this escrow you should have in your possession any documents, securities, or other property belonging to Participant, you shall deliver all of the same to Participant and shall be discharged of all further obligations hereunder.

6. Your duties hereunder may be altered, amended, modified or revoked only by a writing signed by all of the parties hereto.

7. You shall be obligated only for the performance of such duties as are specifically set forth herein and may rely and shall be protected in relying or refraining from acting on any instrument reasonably believed by you to be genuine and to have been signed or presented by the proper party or parties. You shall not be personally liable for any act you may do or omit to do hereunder as Escrow Agent or as attorney-in-fact for Participant while acting in good faith, and any act done or omitted by you pursuant to the advice of your own attorneys shall be conclusive evidence of such good faith.

8. You are hereby expressly authorized to disregard any and all warnings given by any of the parties hereto or by any other person or corporation, excepting only orders or process of courts of law and are hereby expressly authorized to comply with and obey orders, judgments or decrees of any court. In case you obey or comply with any such order, judgment or decree, you shall not be liable to any of the parties hereto or to any other person, firm or corporation by reason of such compliance, notwithstanding any such order, judgment or decree being subsequently reversed, modified, annulled, set aside, vacated or found to have been entered without jurisdiction.

9. You shall not be liable in any respect on account of the identity, authorities or rights of the parties executing or delivering or purporting to execute or deliver the Agreement or any documents or papers deposited or called for hereunder.

10. You shall not be liable for the outlawing of any rights under the Statute of Limitations with respect to these Joint Escrow Instructions or any documents deposited with you.

11. You shall be entitled to employ such legal counsel and other experts as you may deem necessary properly to advise you in connection with your obligations hereunder, may rely upon the advice of such counsel, and may pay such counsel reasonable compensation therefor.

12. Your responsibilities as Escrow Agent hereunder shall terminate if you shall cease to be an officer or agent of the Company or if you shall resign by written notice to each party. In the event of any such termination, the Company shall appoint a successor Escrow Agent.

13. If you reasonably require other or further instruments in connection with these Joint Escrow Instructions or obligations in respect hereto, the necessary parties hereto shall join in furnishing such instruments.

(b)

14. It is understood and agreed that should any dispute arise with respect to the delivery and/or ownership or right of possession of the securities held by you hereunder, you are authorized and directed to retain in your possession without liability to anyone all or any part of said securities until such disputes shall have been settled either by mutual written agreement of the parties concerned or by a final order, decree or judgment of a court of competent jurisdiction after the time for appeal has expired and no appeal has been perfected, but you shall be under no duty whatsoever to institute or defend any such proceedings.

15. Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery or upon deposit in the United States Post Office, by registered or certified mail with postage and fees prepaid, addressed to each of the other parties thereunto entitled at the following addresses or at such other addresses as a party may designate by ten (10) days advance written notice to each of the other parties hereto.

16. By signing these Joint Escrow Instructions, you become a party hereto only for the purpose of said Joint Escrow Instructions; you do not become a party to the Agreement.

17. This instrument shall be binding upon and inure to the benefit of the parties hereto, and their respective successors and permitted assigns.

18. These Joint Escrow Instructions shall be governed by the internal substantive laws, but not the choice of law rules, of California.

PARTICIPANT

_____
Signature

_____
Print Name

_____

_____
Residence Address

FLUIDIGM CORPORATION

_____
By

_____
Print Name

_____
Title

ESCROW AGENT

_____
Corporate Secretary

Dated: _____

(d)

EXHIBIT B-3

ELECTION UNDER SECTION 83(b)
OF THE INTERNAL REVENUE CODE OF 1986

The undersigned taxpayer hereby elects, pursuant to Sections 55 and 83(b) of the Internal Revenue Code of 1986, as amended, to include in taxpayer's gross income or alternative minimum taxable income, as the case may be, for the current taxable year the amount of any compensation taxable to taxpayer in connection with taxpayer's receipt of the property described below.

1. The name, address, taxpayer identification number and taxable year of the undersigned are as follows:

   NAME: _____ SPOUSE: _____

   ADDRESS: _____

   _____

   TAXPAYER IDENTIFICATION NO.: _____ TAXABLE YEAR: _____

2. The property with respect to which the election is made is described as follows: _____ shares (the "Shares") of the Common Stock of Fluidigm Corporation (the "Company").
3. The date on which the property was transferred is: _____, _____.
4. The property is subject to the following restrictions:

   The Shares may not be transferred and are subject to forfeiture under the terms of an agreement between the taxpayer and the Company. These restrictions lapse upon the satisfaction of certain conditions contained in such agreement.
5. The Fair Market Value at the time of transfer, determined without regard to any restriction other than a restriction which by its terms shall never lapse, of such property is: $_____.
6. The amount (if any) paid for such property is: $_____.

The undersigned has submitted a copy of this statement to the person for whom the services were performed in connection with the undersigned's receipt of the above-described property. The transferee of such property is the person performing the services in connection with the transfer of said property.

The undersigned understands that the foregoing election may not be revoked except with the consent of the Commissioner.

Dated: _____, _____

_____
Taxpayer

The undersigned spouse of taxpayer joins in this election.

Dated: _____, _____

_____
Spouse of Taxpayer

(d)

UK SUB-PLAN OF THE

FLUIDIGM CORPORATION

1999 STOCK OPTION PLAN

UK STOCK OPTION AGREEMENT

Unless otherwise defined herein, the terms defined in the UK Sub-Plan of the 1999 Stock Option Plan (or the applicable appendix thereunder) shall have the same defined meanings in this Stock Option Agreement (the "Option Agreement").

This Option will be taxed in the UK as an unapproved securities option.

1. NOTICE OF STOCK OPTION GRANT

«Name»

You have been granted an option to purchase Common Stock of the Company, subject to the terms and conditions of the Sub-Plan, the Joint Election (as defined in Section 9(b) below) and Section 431 Election (as defined in Section 9(c) below) and this Option Agreement, as follows:

Grant Number	
Date of Grant	
Vesting Commencement Date	
Exercise Price per Share	$
Total Number of Shares Granted	
Total Exercise Price	U.S.$
Type of Option:	Unapproved Option
Term/Expiration Date:	

Exercise and Vesting Schedule:

This Option shall be exercisable in whole or in part, and shall vest according to the following vesting schedule:

[Vesting Schule]

(b)

(d)

Termination Period:

This Option may be exercised, to the extent it is then vested, for three months after Optionee ceases to be a Service Provider. Upon death or Disability of the Optionee, this Option may be exercised, to the extent it is then vested, for one year after Optionee ceases to be Service Provider. In no event shall this Option be exercised later than the Term/Expiration Date as provided above.

II. AGREEMENT

(a) Grant of Option. The Administrator of the Company hereby grants to the Optionee named in the Notice of Grant (the "Optionee"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Grant, at the exercise price per Share set forth in the Notice of Grant (the "Exercise Price"), and subject to the terms and conditions of the Sub-Plan, which is incorporated herein by reference. Subject to Section 13(c) of the Sub-Plan, in the event of a conflict between the terms and conditions of the Sub-Plan and this Option Agreement, the terms and conditions of the Sub-Plan shall prevail.

(b) Exercise of Option. This Option shall be exercisable during its term in accordance with the provisions of Section 9 of the Sub-Plan as follows:

(i) Right to Exercise. This Option shall be exercisable during its term in accordance with the Vesting Schedule set out in the Notice of Grant and with the applicable provisions of the Sub-Plan and this Option Agreement.

(ii) Method of Exercise. This Option shall be exercisable by delivery of an exercise notice in the form attached as Exhibit A (the "Exercise Notice") which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised, and is accompanied by a Joint Election, a Section 431 Election and such other representations and agreements as may be required by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares, the Option Tax Liability (as defined in Section 9 (e) below) and the Secondary NIC Liability (as defined in section 9(d)). This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice and such elections and other documents as required by the Company and accompanied by the aggregate Exercise Price, the Option Tax Liability and the Secondary NIC Liability.

No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise complies with Applicable Laws.

(c) Optionee's Representations. In the event the Shares have not been registered under the Securities Act of 1933, as amended, at the time this Option is exercised, the Optionee shall, if required by the Company, concurrently with the exercise of all or any portion of this Option, deliver to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit B.

(b)

(d) Lock-Up Period. Optionee hereby agrees that, if so requested by the Company or any representative of the underwriters (the "Managing Underwriter") in connection with any registration of the offering of any securities of the Company under the Securities Act, Optionee shall not sell or otherwise transfer any Shares or other securities of the Company during the 180-day period (or such other period as may be requested in writing by the Managing Underwriter and agreed to in writing by the Company) (the "Market Standoff Period") following the effective date of a registration statement of the Company filed under the Securities Act. The Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such Market Standoff Period and Optionee agrees to enter into a market stand-off agreement in customary form consistent with this section with the managing underwriter.

(e) Method of Payment. Payment of the aggregate Exercise Price together with payment of the Option Tax Liability and the Secondary NIC Liability shall be by any of the following, or a combination thereof, at the election of the Optionee:

(i) cash;

(ii) cheque;

(iii) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Sub-Plan.

(f) Restrictions on Exercise. This Option may not be exercised until such time as the Plan has been approved by the shareholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any Applicable Law.

(g) Non-Transferability of Option. This Option may not be transferred in any manner during Optionee's lifetime and may be exercised during the lifetime of Optionee only by Optionee. The terms of the Sub-Plan and this Option Agreement shall be binding upon the personal representatives of the Optionee.

(h) Term of Option. This Option may be exercised only within the term set out in the Notice of Grant, and may be exercised during such term only in accordance with the Sub-Plan and the terms of this Option.

(i) Tax Obligations.

(i) Withholding. Optionee agrees to make appropriate arrangements with the Company (or the Parent or Subsidiary employing or retaining Optionee) for the satisfaction of all Federal, state, local and foreign income and employment tax withholding requirements as well as social security charges applicable to the vesting of the Option, the exercise of the Option or the disposition of any Shares acquired upon exercise. In this regard, Optionee authorizes the Company (and/or the Parent or Subsidiary employing or retaining Optionee) to withhold all applicable taxes legally payable by Optionee from the Optionee's wages or other cash compensation paid to Optionee

(b)

by the Company (and/or the Parent or Subsidiary employing or retaining Optionee) or from proceeds from the sale of Shares acquired upon exercise of the Option in an amount sufficient to cover such tax obligations. Optionee acknowledges and agrees that the Company may refuse to honor the exercise and refuse to deliver Shares if such withholding amounts are not delivered at the time of exercise.

(ii) Tax Consultation. Optionee understands that he or she may suffer adverse tax consequences as a result of Optionee's purchase or disposition of the Shares. Optionee represents that he or she will consult with any tax advisors Optionee deems appropriate in connection with the purchase or disposition of the Shares and that Optionee is not relying on the Company for any tax advice.

(iii) Section 431 Election. As a further condition of the exercise of his Option, the Optionee shall have signed a Section 431 election under Section 431 Income Tax (Earnings and Pensions) Act 2003 in the form set out in Exhibit C or in such other form as may be determined by HM Revenue & Customs from time to time ("Section 431 Election").

(iv) Employer's National Insurance Charges. As a futher condition of the exercise of an Option under the Sub-Plan the Optionee shall join with the Company, or if and to the extent that there is a change in the law, any other company or person who is or becomes a secondary contributor for NIC purposes in respect of this Option (the "Secondary Contributor") in making an election (in such terms and such form as provided in paragraphs 3A and 3B of Schedule 1 to the Social Security Contributions and Benefits Act 1992) which has been approved by HM Revenue & Customs (the "Joint Election"), for the transfer of the whole or any liability of the Secondary Contributor to Employer's Class 1 NICs ("Secondary NIC Liability").

(v) Optionee's Tax Indemnity.

(i) Indemnity To the extent permitted by law, the Optionee hereby agrees to indemnify and keep indemnified the Company, and the Company as trustee for and on behalf of any related corporation, in respect of any liability or obligation of the Company and/or any related corporation to account for income tax (under PAYE) or any other taxation provisions and primary class 1 national insurance contributions in the United Kingdom (the "Option Tax Liability") to the extent arising from the grant, exercise, assignment, release, cancellation or any other disposal of an Option or arising out of the acquisition, retention and disposal of the Shares acquired pursuant to this Option.

(ii) No Obligation to Issue Shares. The Company shall not be obliged to allot and issue any Shares or any interest in Shares pursuant to the exercise of this option unless and until the Optionee has paid to the Company such sum as is, in the opinion of the Company, sufficient to indemnify the Company in full against the Option Tax Liability and the Secondary NIC Liability, or the Optionee has made such other arrangement as in the opinion of the Company will ensure that the full amount of any Option Tax Liability and any Secondary NIC Liability will be recovered from the Optionee within such period as the Company may then determine.

(b)

(iii) Right of Retention. In the absence of any such other arrangement being made, the Company shall have the right to retain out of the aggregate number of shares to which the Optionee would have otherwise been entitled upon the exercise of this option, such number of Shares as, in the opinion of the Company, will enable the Company to sell as agent for the Optionee (at the best price which can reasonably expect to be obtained at the time of the sale) and to pay over to the Company sufficient monies out of the net proceeds of sale, after deduction of all fees, commissions and expenses incurred in relation to such sale, to satisfy the Optionee's liability under such indemnity

(j) Acknowledgements.

(i) Optionee acknowledges receipt of a copy of the Sub-Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Optionee has reviewed the Sub-Plan and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Sub-Plan or this Option. Optionee further agrees to notify the Company upon any change in the residence address indicated below.

(ii) The Company (and not Optionee's employer) is granting the Option. The Company will administer theSub-Plan from outside Optionee's country of residence and that United States of America law will govern all Options granted under the Sub-Plan.

(iii) That benefits and rights provided under the Sub-Plan are wholly discretionary and, although provided by the Company, do not constitute regular or periodic payments. The benefits and rights provided under the Sub-Plan are not to be considered part of Optionee' s salary or compensation for purposes of calculating any severance, resignation, redundancy or other end of service payments, vacation, bonuses, long-term service awards, indemnification, pension or retirement benefits, or any other payments, benefits or rights of any kind. Optionee waives any and all rights to compensation or damages as a result of the termination of employment with the Company for any reason whatsoever insofar as those rights result or may result from:

(1) the loss or diminution in value of such rights under the Subn-Plan, or

(2) Optionee ceases to have any rights under, or ceases to be entitled to any rights under the Sub-Plan as a result of such termination.

(iv) The grant of the Option, and any future grant of Options under the Sub-Plan is entirely voluntary, and at the complete discretion of the Company. Neither the grant of the Option nor any future grant of an Option by the Company will be deemed to create any obligation to grant any further Options, whether or not such a reservation is explicitly stated at the time of such a grant. The Company has the right, at any time to amend, suspend or terminate the Sub-Plan.

(b)

(v) The Sub-Plan will not be deemed to constitute, and will not be construed by Optionee to constitute, part of the terms and conditions of employment, and that the Company will not incur any liability of any kind to Optionee as a result of any change or amendment, or any cancellation, of the Sub-Plan at any time.

(vi) Participation in the Sub-Plan will not be deemed to constitute, and will not be deemed by Optionee to constitute, an employment or labor relationship of any kind with the Company.

(vii) By entering into this Option Agreement, and as a condition of the grant of the Option, Optionee consents to the collection, use, and transfer of personal data as described in this subsection to the full extent permitted by and in full compliance with Applicable Law.

(1) Optionee understands that the Company and its Subsidiaries hold certain personal information about the Optionee, including, but not limited to, name, home address and telephone number, date of birth, social insurance number, salary, nationality, job title, any Shares or directorships held in the Company, details of all Options or other entitlement to Shares awarded, canceled, exercised, vested, unvested, or outstanding in Optionee's favor, for the purpose of managing and administering the Sub-Plan ("Data").

(2) Optionee further understands that the Company and/or its Subsidiaries will transfer Data among themselves as necessary for the purposes of implementation, administration, and management of Optionee's participation in the Sub-Plan, and that the Company and/or its Subsidiary may each further transfer Data to any third parties assisting the Company in the implementation, administration, and management of the Sub-Plan ("Data Recipients").

(3) Optionee understands that these Data Recipients may be located in Optionee's country of residence or elsewhere, such as the United States. Optionee authorizes the Data Recipients to receive, possess, use, retain, and transfer Data in electronic or other form, for the purposes of implementing, administering, and managing Optionee's participation in the Sub-Plan, including any transfer of such Data, as may be required for the administration of the Sub-Plan and/or the subsequent holding of Shares on Optionee' s behalf, to a broker or third party with whom the Shares acquired on exercise may be deposited. Where the transfer is to be to a destination outside the European Economic Area, the Company shall take reasonable steps to ensure that the Optionee's personal data continues to be adequately protected and securely held. The Optionee understands that the Optionee may, at any time, view the Optionee's personal data, require any necessary corrections to it or withdraw the consents herein in writing by contacting the Human Resources Department of the Company (but the Optionee acknowledges that without the use of such data it may not be practicable for the Company to administer the Optionee's involvement in the Sub-Plan in a timely fashion or at all and this may be detrimental to the Optionee).

(4) Optionee understands that Optionee may, at any time, review the Data, request that any necessary amendments be made to it, or withdraw Optionee's consent herein in

(b)

writing by contacting the Company. Optionee further understands that withdrawing consent may affect Optionee's ability to participate in the Sub-Plan.

(viii) Optionee has received the terms and conditions of this Option Agreement and any other related communications, and Optionee consents to having received these documents in English.

(k) Entire Agreement; Governing Law. The Sub-Plan is incorporated herein by reference. The Sub-Plan, Joint Election, Section 341 Election and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee. This Option Agreement is governed by the internal substantive laws but not the choice of law rules of the State of California.

(l) No Guarantee of Continued Service. OPTIONEE ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER OF THE COMPANY (NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER). OPTIONEE FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED EMPLOYMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH OPTIONEE'S RIGHT OR THE COMPANY'S RIGHT TO TERMINATE OPTIONEE'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

Optionee acknowledges receipt of a copy of the Sub-Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Optionee has reviewed the Sub-Plan, Joint Election, Section 431 Election and this Option in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Sub-Plan or this Option. Optionee further agrees to notify the Company upon any change in the residence address indicated below.

OPTIONEE:

_____

«Name»

Residence Address:

FLUIDIGM CORPORATION

By: _____

Title: _____

(b)

_____

_____

_____

(d)

EXHIBIT A

UK SUB-PLAN OF THE

FLUIDIGM CORPORATION

1999 STOCK OPTION PLAN

EXERCISE NOTICE

Fluidigm Corporation
Attn: President
7100 Shoreline Court
South San Francisco, CA 94080

1. Exercise of Option. Effective as of today, _____, ____, the undersigned ("Optionee") hereby elects to exercise Optionee's option (the "Option") to purchase _____ shares of the Common Stock (the "Shares") of Fluidigm Corporation (the "Company") under and pursuant to the UK Sub-Plan of the 1999 Stock Option Plan (the "Sub-Plan"), Joint Election and Section 431 Election and the Stock Option Agreement dated «GrantDate» (the "Option Agreement").

2. Delivery of Payment. Optionee herewith delivers to the Company the full purchase price of the Shares, as set forth in the Option Agreement, together with payment of the Option Tax Liability and the Secondary NIC Liability and any other withholding taxes due in connection with the exercise of the Option.

3. Representations of Optionee. Optionee acknowledges that Optionee has received, read and understood the Sub-Plan, Joint Election, Section 431 Election and the Option Agreement and agrees to abide by and be bound by their terms and conditions.

4. Rights as Shareholder. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a shareholder shall exist with respect to the optioned stock, notwithstanding the exercise of the Option. The Shares shall be issued to the Optionee as soon as practicable after the Option is exercised. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance except as provided in Section 11 of the Sub-Plan.

5. Company's Right of First Refusal. Before any Shares held by Optionee or any transferee (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section (the "Right of First Refusal").

(b)

(a) Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares (the "Offered Price"), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

(b) Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection (c) below.

(c) Purchase Price. The purchase price ("Purchase Price") for the Shares purchased by the Company or its assignee(s) under this Section shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

(d) Payment. Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by cheque), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within 30 days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(e) Holder's Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section, then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, provided that such sale or other transfer is consummated within 120 days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(f) Exception for Certain Family Transfers. Anything to the contrary contained in this Section notwithstanding, the transfer of any or all of the Shares during the Optionee's lifetime or on the Optionee's death by will or intestacy to the Optionee's immediate family or a trust for the benefit of the Optionee's immediate family shall be exempt from the provisions of this Section. "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the

(b)

Shares so transferred subject to the provisions of this Section, and there shall be no further transfer of such Shares except in accordance with the terms of this Section.

(g) Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act of 1933, as amended.

6. Tax Consultation. Optionee understands that Optionee may suffer adverse tax consequences as a result of Optionee's purchase or disposition of the Shares. Optionee represents that Optionee has consulted with any tax consultants Optionee deems advisable in connection with the purchase or disposition of the Shares and that Optionee is not relying on the Company for any tax advice.

7. Restrictive Legends and Stop-Transfer Orders.

(a) Legends. Optionee understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COMPANY COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND RIGHT OF FIRST REFUSAL OPTIONS HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE EXERCISE NOTICE BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER FOR A PERIOD NOT TO EXCEED 180 DAYS FOLLOWING THE EFFECTIVE

(b)

DATE OF UNDERWRITTEN PUBLIC OFFERING OF THE COMPANY'S SECURITIES AND MAY NOT BE SOLD OR OTHERWISE DISPOSED OF BY THE HOLDER WITHOUT THE CONSENT OF THE COMPANY OR THE MANAGING UNDERWRITER.

(b) Stop-Transfer Notices. Optionee agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Exercise Notice or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

8. Successors and Assigns. The Company may assign any of its rights under this Exercise Notice to single or multiple assignees, and the terms and conditions of this Exercise Notice shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, the terms and conditions of this Exercise Notice shall be binding upon Optionee and his or her personal representatives.

9. Interpretation. Any dispute regarding the interpretation of this Exercise Notice shall be submitted by Optionee or by the Company forthwith to the Administrator which shall review such dispute at its next regular meeting. The resolution of such a dispute by the Administrator shall be final and binding on all parties.

10. Governing Law; Severability. This Exercise Notice is governed by the internal substantive laws, but not the choice of law rules, of the State of California.

11. Entire Agreement. The Sub-Plan, Joint Election, Section 431 Election and Option Agreement are incorporated herein by reference. This Exercise Notice, the Joint Election, the Section 431 Election, the Sub-Plan, the Restricted Stock Purchase Agreement, the Option Agreement and the Investment Representation Statement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee.

Submitted by:	Accepted by:
OPTIONEE:	FLUIDIGM CORPORATION
_____	By: _____
«Name»	

(b)

Its: _____

Address:

Date Received: _____

_____

_____

_____

(d)

EXHIBIT B

INVESTMENT REPRESENTATION STATEMENT

OPTIONEE	:	«NAME»
COMPANY	:	FLUIDIGM CORPORATION
SECURITY	:	COMMON STOCK
AMOUNT	:	
DATE	:	

In connection with the purchase of the above-listed Securities, the undersigned Optionee represents to the Company the following:

(a) Optionee is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Optionee is acquiring these Securities for investment for Optionee's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Optionee acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Optionee's investment intent as expressed herein. In this connection, Optionee understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Optionee's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one year or any other fixed period in the future. Optionee further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Optionee further acknowledges and understands that the Company is under no obligation to register the Securities. Optionee understands that the certificate evidencing the Securities will be imprinted with a legend which prohibits the transfer of the Securities unless they are registered or such registration is not required in the opinion of counsel satisfactory to the Company, and with any other legend required under applicable state securities laws.

(c) Optionee is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Option to the Optionee, the exercise will be exempt from registration under

(b)

the Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701 may be resold, subject to the satisfaction of certain of the conditions specified by Rule 144, including: (1) the resale being made through a broker in an unsolicited "broker's transaction" or in transactions directly with a market maker (as said term is defined under the Securities Exchange Act of 1934); and, in the case of an affiliate, (2) the availability of certain public information about the Company, (3) the amount of Securities being sold during any three month period not exceeding the limitations specified in Rule 144(e), and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Option, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which requires the resale to occur not less than one year after the later of the date the Securities were sold by the Company or the date the Securities were sold by an affiliate of the Company, within the meaning of Rule 144; and, in the case of acquisition of the Securities by an affiliate, or by a non-affiliate who subsequently holds the Securities less than two years, the satisfaction of the conditions set forth in sections (1), (2), (3) and (4) of the paragraph immediately above.

(d) Optionee further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption will be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Optionee understands that no assurances can be given that any such other registration exemption will be available in such event.

Signature of Optionee:

_____

«Name»

Date: _____, ____

(b)

EXHIBIT C

Joint Election under s431 ITEPA 2003 for full or partial disapplication of Chapter 2 Income Tax (Earnings and Pensions) Act 2003

One Part Election

1. **Between**

the Employee	«Name»
whose National Insurance Number is	_____
and	
the Company (who is the Employee's employer)	Fluidigm Europe, BV
of Company Registration Number	_____

2. **Purpose of Election**

This joint election is made pursuant to section 431(1) or 431(2) Income Tax (Earnings and Pensions) Act 2003 (ITEPA) and applies where employment-related securities, which are restricted securities by reason of section 423 ITEPA, are acquired.

The effect of an election under section 431(1) is that, for the relevant Income Tax and NIC purposes, the employment-related securities and their market value will be treated as if they were not restricted securities and that sections 425 to 430 ITEPA do not apply. An election under section 431(2) will ignore one or more of the restrictions in computing the charge on acquisition. Additional Income Tax will be payable (with PAYE and NIC where the securities are Readily Convertible Assets).

Should the value of the securities fall following the acquisition, it is possible that Income Tax/NIC that would have arisen because of any future chargeable event (in the absence of an election) would have been less than the Income Tax/NIC due by reason of this election. Should this be the case, there is no Income Tax/NIC relief available under Part 7 of ITEPA 2003; nor is it available if the securities acquired are subsequently transferred, forfeited or revert to the original owner.

3. **Application**

This joint election is made not later than 14 days after the date of acquisition of the securities by the employee and applies to:

Number of securities	_____
Description of securities	Common Stock of Fluidigm Corporation.

(b)

Name of issuer of securities Fluidigm Corporation.
To be acquired by the Employee after ____, _____ *20__ [dd/mm/yyyy]* under the terms of the UK Sub-Plan of the Fluidigm Corporation 1999 Stock Option Plan.

4. **Extent of Application**

This election disapplies section 431(1) ITEPA: all restrictions attaching to the securities.

5. **Declaration**

This election will become irrevocable upon the later of its signing or the acquisition (* and each subsequent acquisition) of employment-related securities to which this election applies.

(delete as appropriate)*

In signing this joint election, we agree to be bound by its terms as stated above.

..../..../.....
Signature (Employee) Date

..../..../.....
Signature (for and on behalf of the Company) Date

.....
Position in company

Note: Where the election is in respect of multiple acquisitions, prior to the date of any subsequent acquisition of a security it may be revoked by agreement between the employee and employer in respect of that and any later acquisition.

FLUIDIGM CORPORATION

2009 EQUITY INCENTIVE PLAN

INTERNATIONAL STOCK OPTION AGREEMENT

Unless otherwise defined herein, the terms defined in the 2009 Equity Incentive Plan, including any applicable appendices thereunder (collectively, the "Plan"), shall have the same defined meanings in this International Stock Option Agreement (the "Option Agreement").

I. NOTICE OF STOCK OPTION GRANT

Name:
Address:

The undersigned Participant has been granted an Option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan and this Option Agreement, as follows:

Date of Grant:	
Vesting Commencement Date:	
Exercise Price per Share:	US$
Total Number of Shares Granted:	«No of Shares Granted»
Total Exercise Price :	US$
Type of Option:	___ Incentive Stock Option
	X Nonstatutory Stock Option
Term/Expiration Date:	

Vesting Schedule:

This Option shall be exercisable, in whole or in part, according to the following vesting schedule:

[Vesting Schedule]

Termination Period:

This Option shall be exercisable for three (3) months after Participant ceases to be a Service Provider, unless such termination is due to Participant's death or Disability, in which case this Option shall be exercisable for twelve (12) months after Participant ceases to be a Service Provider. Notwithstanding the foregoing sentence, in no event may this Option be exercised after the Term/Expiration Date as provided above and this Option may be subject to earlier termination as provided in Section 13(c) of the Plan.

II. AGREEMENT

1. Grant of Option. The Administrator of the Company hereby grants to the Participant named in the Notice of Stock Option Grant in Part I of this Agreement ("Participant"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Stock Option Grant, at the exercise price per Share set forth in the Notice of Stock Option Grant (the "Exercise Price"), and subject to the terms and conditions of the Plan, which is incorporated herein by reference. Subject to Section 18(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and this Option Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Stock Option Grant as an Incentive Stock Option ("ISO"), this Option is intended to qualify as an Incentive Stock Option as defined in Section 422 of the Code. Nevertheless, to the extent that it exceeds the $100,000 rule of Code Section 422(d), this Option shall be treated as a Nonstatutory Stock Option ("NSO"). Further, if for any reason this Option (or portion thereof) shall not qualify as an ISO, then, to the extent of such nonqualification, such Option (or portion thereof) shall be regarded as a NSO granted under the Plan. In no event shall the Administrator, the Company or any Parent or Subsidiary or any of their respective employees or directors have any liability to Participant (or any other person) due to the failure of the Option to qualify for any reason as an ISO.

2. Exercise of Option.

(a) Right to Exercise. This Option shall be exercisable during its term in accordance with the Vesting Schedule set out in the Notice of Stock Option Grant and with the applicable provisions of the Plan and this Option Agreement.

(b) Method of Exercise. This Option shall be exercisable by delivery of an exercise notice in the form attached as Exhibit A (the "Exercise Notice") or in a manner and pursuant to such procedures as the Administrator may determine, which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised, and such other representations and agreements as may be required by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares, together with any applicable tax withholding. This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Exercise Price, together with any applicable tax withholding.

No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise comply with Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to Participant on the date on which the Option is exercised with respect to such Shares.

3. Participant's Representations. In the event the Shares have not been registered under the Securities Act of 1933, as amended, at the time this Option is exercised, Participant shall, if required by the Company, concurrently with the exercise of all or any portion of this Option, deliver to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit B.

4. Lock-Up Period. Participant hereby agrees that Participant shall not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any Common Stock (or other securities) of the Company or enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Common Stock (or other securities) of the Company held by Participant (other than those included in the registration) for a period specified by the representative of the underwriters of Common Stock (or other securities) of the Company not to exceed one hundred and eighty (180) days following the effective date of any registration statement of the Company filed under the Securities Act (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto).

Participant agrees to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriter which are consistent with the foregoing or which are necessary to give further effect thereto. In addition, if requested by the Company or the representative of the underwriters of Common Stock (or other securities) of the Company, Participant shall provide, within ten (10) days of such request, such information as may be required by the Company or such representative in connection with the completion of any public offering of the Company's securities pursuant to a registration statement filed under the Securities Act. The obligations described in this Section II.4 shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a Commission Rule 145 transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions with respect to the shares of Common Stock (or other securities) subject to the foregoing restriction until the end of said one hundred and eighty (180) day (or other) period. Participant agrees that any transferee of the Option or shares acquired pursuant to the Option shall be bound by this Section 4.

5. Method of Payment. Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of the Participant:

(a) cash;

(b) check;

(c) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan (which shall include, without limitation, the ability to net exercise the Option); or

(d) surrender of other Shares which (i) shall be valued at its Fair Market Value on the date of exercise, and (ii) must be owned free and clear of any liens, claims, encumbrances or security interests, if accepting such Shares, in the sole discretion of the Administrator, shall not result in any adverse accounting consequences to the Company.

6. Restrictions on Exercise. This Option may not be exercised until such time as the Plan has been approved by the stockholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any Applicable Law.

7. Non-Transferability of Option.

(a) This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Participant only by Participant. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of Participant.

(b) Further, until the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, or after the Administrator determines that it is, will, or may no longer be relying upon the exemption from registration of Options under the Exchange Act as set forth in Rule 12h-1(f) promulgated under the Exchange Act (the "Reliance End Date"), Participant shall not transfer this Option or, prior to exercise, the Shares subject to this Option, in any manner other than (i) to persons who are "family members" (as defined in Rule 701(c)(3) of the Securities Act of 1933, as amended) through gifts or domestic relations orders, or (ii) to an executor or guardian of Participant upon the death or disability of Participant. Until the Reliance End Date, the Options and, prior to exercise, the Shares subject to this Option, may not be pledged, hypothecated or otherwise transferred or disposed of, including by entering into any short position, any "put equivalent position" or any "call equivalent position" (as defined in Rule 16a-1(h) and Rule 16a-1(b) of the Exchange Act, respectively), other than as permitted in clauses (i) and (ii) of this paragraph.

8. Term of Option. This Option may be exercised only within the term set out in the Notice of Stock Option Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option.

9. Tax Obligations.

(a) Tax Withholding. Participant agrees to make appropriate arrangements with the Company (or the Parent or Subsidiary employing or retaining Participant) for the satisfaction of all Federal, state, local and foreign income and employment tax withholding requirements as well as

social security charges applicable to the Option, the exercise of the Option or the disposition of any Shares acquired upon exercise. In this regard, Participant authorizes the Company (and/or the Parent or Subsidiary employing or retaining Participant) to withhold all applicable taxes legally payable by Participant from the Participant's wages or other cash compensation paid to Participant by the Company (and/or the Parent or Subsidiary employing or retaining Participant) or from proceeds from the sale of Shares acquired upon exercise of the Option in an amount sufficient to cover such tax obligations. Participant acknowledges and agrees that the Company may refuse to honor the exercise and refuse to deliver the Shares if such withholding amounts are not delivered at the time of exercise.

(b) Tax Consultation. Participant understands that he or she may suffer adverse tax consequences as a result of Participant's purchase or disposition of the Shares. Participant represents that he or she will consult with any tax advisors Participant deems appropriate in connection with the purchase or disposition of the Shares and that Participant is not relying on the Company for any tax advice.

10. Acknowledgements.

(a) Participant acknowledges receipt of a copy of the Plan (including any applicable appendixes thereunder) and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Participant has reviewed the Plan (including any applicable appendixes thereunder) and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Participant further agrees to notify the Company upon any change in the residence address indicated below.

(b) The Company (and not Participant's employer) is granting the Option. The Company will administer the Plan from outside Participant's country of residence and that United States of America law will govern all Options granted under the Plan.

(c) That benefits and rights provided under the Plan are wholly discretionary and, although provided by the Company, do not constitute regular or periodic payments. The benefits and rights provided under the Plan are not to be considered part of Participant' s salary or compensation for purposes of calculating any severance, resignation, redundancy or other end of service payments, vacation, bonuses, long-term service awards, indemnification, pension or retirement benefits, or any other payments, benefits or rights of any kind. Participant waives any and all rights to compensation or damages as a result of the termination of employment with the Company for any reason whatsoever insofar as those rights result or may result from:

(i) the loss or diminution in value of such rights under the Plan, or

(ii) Participant ceases to have any rights under, or ceases to be entitled to any rights under the Plan as a result of such termination.

(d) The grant of the Option, and any future grant of Options under the Plan is entirely voluntary, and at the complete discretion of the Company. Neither the grant of the Option nor any future grant of an Option by the Company will be deemed to create any obligation to grant any further Options, whether or not such a reservation is explicitly stated at the time of such a grant. The Company has the right, at any time to amend, suspend or terminate the Plan.

(e) The Plan will not be deemed to constitute, and will not be construed by Participant to constitute, part of the terms and conditions of employment, and that the Company will not incur any liability of any kind to Participant as a result of any change or amendment, or any cancellation, of the Plan at any time.

(f) Participation in the Plan will not be deemed to constitute, and will not be deemed by Participant to constitute, an employment or labor relationship of any kind with the Company.

(g) By entering into this Option Agreement, and as a condition of the grant of the Option, Participant consents to the collection, use, and transfer of personal data as described in this subsection to the full extent permitted by and in full compliance with Applicable Law.

(i) Participant understands that the Company and its Subsidiaries hold certain personal information about the Participant, including, but not limited to, name, home address and telephone number, date of birth, social insurance number, salary, nationality, job title, any Shares or directorships held in the Company, details of all Options or other entitlement to Shares awarded, canceled, exercised, vested, unvested, or outstanding in Participant's favor, for the purpose of managing and administering the Plan ("Data").

(ii) Participant further understands that the Company and/or its Subsidiaries will transfer Data among themselves as necessary for the purposes of implementation, administration, and management of Participant's participation in the Plan, and that the Company and/or its Subsidiary may each further transfer Data to any third parties assisting the Company in the implementation, administration, and management of the Plan ("Data Recipients").

(iii) Participant understands that these Data Recipients may be located in Participant's country of residence or elsewhere, such as the United States. Participant authorizes the Data Recipients to receive, possess, use, retain, and transfer Data in electronic or other form, for the purposes of implementing, administering, and managing Participant's participation in the Plan, including any transfer of such Data, as may be required for the administration of the Plan and/or the subsequent holding of Shares on Participant's behalf, to a broker or third party with whom the Shares acquired on exercise may be deposited.

(iv) Participant understands that Participant may, at any time, review the Data, request that any necessary amendments be made to it, or withdraw Participant's consent herein in writing by contacting the Company. Participant further understands that withdrawing consent may affect Participant's ability to participate in the Plan.

(h) Participant has received the terms and conditions of this Option Agreement and any other related communications, and Participant consents to having received these documents in English.

11. Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant's interest except by means of a writing signed by the Company and Participant. This Agreement is governed by the internal substantive laws but not the choice of law rules of California.

12. No Guarantee of Continued Service. PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER. PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH PARTICIPANT'S RIGHT OR THE RIGHT OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) TO TERMINATE PARTICIPANT'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

Participant acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Option in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Participant further agrees to notify the Company upon any change in the residence address indicated below.

PARTICIPANT	FLUIDIGM CORPORATION
Signature	By
Print Name	Print Name
	Title
Residence Address	

EXHIBIT A

2009 EQUITY INCENTIVE PLAN

EXERCISE NOTICE

Fluidigm Corporation
7000 Shoreline Court, Suite 100
South San Francisco, CA 94080

Attention: Stock Plan Administrator

1. Exercise of Option. Effective as of today, _____, _____, the undersigned ("Participant") hereby elects to exercise Participant's option (the "Option") to purchase _____ shares of the Common Stock (the "Shares") of Fluidigm Corporation (the "Company") under and pursuant to the 2009 Equity Incentive Plan, including any applicable appendices thereunder (collectively, the "Plan"), and the Stock Option Agreement dated «GrantDate» (the "Option Agreement").

2. Delivery of Payment. Participant herewith delivers to the Company the full purchase price of the Shares, as set forth in the Option Agreement, and any and all withholding taxes due in connection with the exercise of the Option.

3. Representations of Participant. Participant acknowledges that Participant has received, read and understood the Plan and the Option Agreement and agrees to abide by and be bound by their terms and conditions.

4. Rights as Stockholder. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Common Stock subject to an Award, notwithstanding the exercise of the Option. The Shares shall be issued to Participant as soon as practicable after the Option is exercised in accordance with the Option Agreement. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance except as provided in Section 13 of the Plan.

5. Company's Right of First Refusal. Before any Shares held by Participant or any transferee (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section 5 (the "Right of First Refusal").

(a) Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee;

and (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares (the "Offered Price"), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

(b) Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection 8 below.

(c) Purchase Price. The purchase price ("Purchase Price") for the Shares purchased by the Company or its assignee(s) under this Section 5 shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

(d) Payment. Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within thirty (30) days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(e) Holder's Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section 5, then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, *provided* that such sale or other transfer is consummated within one hundred and twenty (120) days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section 5 shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(f) Exception for Certain Family Transfers. Anything to the contrary contained in this Section 5 notwithstanding, the transfer of any or all of the Shares during the Participant's lifetime or on the Participant's death by will or intestacy to the Participant's immediate family or a trust for the benefit of the Participant's immediate family shall be exempt from the provisions of this Section 5. "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section 5, and there shall be no further transfer of such Shares except in accordance with the terms of this Section 5.

(g) Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the earlier of (i) the first sale of Common Stock of the Company to the general public, or (ii) a Change in Control in which the successor corporation has equity securities that are publicly traded.

6. Tax Consultation. Participant understands that Participant may suffer adverse tax consequences as a result of Participant's purchase or disposition of the Shares. Participant represents that Participant has consulted with any tax consultants Participant deems advisable in connection with the purchase or disposition of the Shares and that Participant is not relying on the Company for any tax advice.

7. Restrictive Legends and Stop-Transfer Orders.

(a) Legends. Participant understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND A RIGHT OF FIRST REFUSAL HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE EXERCISE NOTICE BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER FOR A PERIOD OF TIME FOLLOWING THE EFFECTIVE DATE OF THE UNDERWRITTEN PUBLIC OFFERING OF THE COMPANY'S SECURITIES SET FORTH IN AN AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES AND MAY NOT BE SOLD OR OTHERWISE DISPOSED OF BY THE HOLDER PRIOR TO THE EXPIRATION OF SUCH PERIOD WITHOUT THE CONSENT OF THE COMPANY OR THE MANAGING UNDERWRITER.

(b) Stop-Transfer Notices. Participant agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of

this Exercise Notice or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

8. Successors and Assigns. The Company may assign any of its rights under this Exercise Notice to single or multiple assignees, and this Exercise Notice shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Exercise Notice shall be binding upon Participant and his or her heirs, executors, administrators, successors and assigns.

9. Interpretation. Any dispute regarding the interpretation of this Exercise Notice shall be submitted by Participant or by the Company forthwith to the Administrator, which shall review such dispute at its next regular meeting. The resolution of such a dispute by the Administrator shall be final and binding on all parties.

10. Governing Law; Severability. This Exercise Notice is governed by the internal substantive laws, but not the choice of law rules, of California. In the event that any provision hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Exercise Notice shall continue in full force and effect.

11. Entire Agreement. The Plan and Option Agreement are incorporated herein by reference. This Exercise Notice, the Plan, the Option Agreement and the Investment Representation Statement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant's interest except by means of a writing signed by the Company and Participant.

Submitted by: PARTICIPANT	Accepted by: FLUIDIGM CORPORATION
_____ Signature	_____ By
_____ Print Name	_____ Print Name
	_____ Title
Address:	Address:
_____	_____
_____	_____
	_____ Date Received

EXHIBIT B

INVESTMENT REPRESENTATION STATEMENT

PARTICIPANT :

COMPANY : FLUIDIGM CORPORATION

SECURITY : COMMON STOCK

AMOUNT :

DATE :

In connection with the purchase of the above-listed Securities, the undersigned Participant represents to the Company the following:

(a) Participant is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Participant is acquiring these Securities for investment for Participant's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Participant acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Participant's investment intent as expressed herein. In this connection, Participant understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Participant's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one (1) year or any other fixed period in the future. Participant further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Participant further acknowledges and understands that the Company is under no obligation to register the Securities. Participant understands that the certificate evidencing the Securities shall be imprinted with any legend required under applicable state securities laws.

(c) Participant is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Option to Participant, the exercise shall be exempt from registration under the

Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701 may be resold, subject to the satisfaction of the applicable conditions specified by Rule 144, including in the case of affiliates (1) the availability of certain public information about the Company, (2) the amount of Securities being sold during any three (3) month period not exceeding specified limitations, (3) the resale being made in an unsolicited "broker's transaction", transactions directly with a "market maker" or "riskless principal transactions" (as those terms are defined under the Securities Exchange Act of 1934) and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Option, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which may require (i) the availability of current public information about the Company; (ii) the resale to occur more than a specified period after the purchase and full payment (within the meaning of Rule 144) for the Securities; and (iii) in the case of the sale of Securities by an affiliate, the satisfaction of the conditions set forth in sections (2), (3) and (4) of the paragraph immediately above.

(d) Participant further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption shall be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 shall have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Participant understands that no assurances can be given that any such other registration exemption shall be available in such event.

PARTICIPANT

_____
Signature

_____
Print Name

_____
Date

FLUIDIGM CORPORATION

2009 EQUITY INCENTIVE PLAN

FRENCH STOCK OPTION AGREEMENT

Unless otherwise defined herein, the terms defined in the 2009 Equity Incentive Plan, including any applicable appendices thereunder (collectively, the "Plan"), shall have the same defined meanings in this French Stock Option Agreement (the "Option Agreement").

I. NOTICE OF STOCK OPTION GRANT

Name:
Address:

The undersigned Participant has been granted an Option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan and this Option Agreement, as follows:

Date of Grant:

Vesting Commencement Date:

Exercise Price per Share: US$

Total Number of Shares Granted:

Total Exercise Price : US$«TotalExPrice»

Type of Option: ☐ Incentive Stock Option

☐ Nonstatutory Stock Option

Term/Expiration Date:

Vesting Schedule:

This Option shall be exercisable, in whole or in part, according to the following vesting schedule:

[Vesting schedule]; ***provided, however,*** **the Option granted hereunder may not be exercised before the one (1) year anniversary following the date the Option is granted ("Initial Exercise Date") whether or not the Option has vested prior to such time.**

Restriction on Sale:

The Shares may not be transferred, assigned or hypothecated in any manner other than by will or by the laws of descent or distribution before the date three (3) years after the Initial Exercise Date (the "Holding Period"), except upon the occurrence of an event provided for by Article 91 ter of Annex II to the French Tax Code.

Participant shall be obligated to have Shares held pursuant to an escrow arrangement established by the Company, in order to insure compliance with the Holding Period and so that the Company may sufficiently track the Shares acquired upon exercise of the Option and the Company shall be given sufficient access to any account Participant may have with respect to any such Shares so that the Company may correctly provide any required reports to the French taxing authorities as required by Applicable Laws. Participant hereby authorizes and directs the Company to hold all Shares exercised subject to this Option under the Escrow Provisions attached hereto as Exhibit B, for the duration of the Holding Period or until such time as this Option Agreement is no longer in effect. Participant hereby appoints the Secretary of the Company, or any other person designated by the Company, as escrow agent and shall, upon execution of this Option Agreement, deliver and deposit with the Secretary of the Company, or such other person designated by the Company, the share certificates representing the Shares.

The Company, or its designee, shall not be liable for any act it may do or omit with respect to holding the Shares in escrow and while acting in good faith and in the exercise of its judgment.

Termination Period:

This Option shall be exercisable for three (3) months after Participant ceases to be a Service Provider, unless such termination is due to Participant's death or Disability, in which case this Option shall be exercisable for twelve (12) months after Participant ceases to be a Service Provider in the event of Participant's Disability and six (6) months in the event of Participant's death. Notwithstanding the foregoing sentence, in no event may this Option be exercised after the Term/Expiration Date as provided above and this Option may be subject to earlier termination as provided in Section 13(c) of the Plan.

II. AGREEMENT

1. Grant of Option. The Administrator of the Company hereby grants to the Participant named in the Notice of Stock Option Grant in Part I of this Option Agreement ("Participant"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Stock Option Grant, at the exercise price per Share set forth in the Notice of Stock Option Grant (the "Exercise Price"), and subject to the terms and conditions of the Plan, which is incorporated herein by reference. Subject to Section 18(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and this Option Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Stock Option Grant as an Incentive Stock Option ("ISO"), this Option is intended to qualify as an Incentive Stock Option as defined in Section 422 of the Code. Nevertheless, to the extent that it exceeds the $100,000 rule of Code Section 422(d), this Option shall be treated as a Nonstatutory Stock Option ("NSO"). Further, if for any reason this Option (or portion thereof) shall not qualify as an ISO, then, to the extent of such nonqualification, such Option (or portion thereof) shall be regarded as a NSO granted under the Plan. In no event shall the Administrator, the Company or any Parent or Subsidiary or any of their respective employees or directors have any liability to Participant (or any other person) due to the failure of the Option to qualify for any reason as an ISO.

2. Exercise of Option.

(a) Right to Exercise. This Option shall be exercisable during its term in accordance with the Vesting Schedule set out in the Notice of Stock Option Grant and with the applicable provisions of the Plan and this Option Agreement.

(b) Method of Exercise. This Option shall be exercisable by delivery of an exercise notice to the Company, in the form attached as Exhibit A (the "Exercise Notice") or in a manner and pursuant to such procedures as the Administrator may determine, which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised (the "Exercised Shares"), and such other representations and agreements as may be required by the Company and/or the Subsidiary pursuant to the provisions of the Plan (including Appendix B). Until the issuance of the Exercised Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Exercised Shares, notwithstanding the exercise of the Option. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance of the Exercised Shares, except as provided in Appendix B of the Plan. The Exercise Notice shall be signed by Participant and shall be delivered in person or by certified mail to the Secretary of the Company or such other person as the Company may designate. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares and all applicable tax withholdings. This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Exercise Price and payment of all applicable tax withholdings. No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise comply with Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to Participant on the date on which the Option is exercised with respect to such Shares.

3. Participant's Representations. In the event the Shares have not been registered under the Securities Act of 1933, as amended, at the time this Option is exercised, Participant shall, if required by the Company, concurrently with the exercise of all or any portion of this Option, deliver to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit C.

4. Lock-Up Period. Participant hereby agrees that Participant shall not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant

any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any Common Stock (or other securities) of the Company or enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Common Stock (or other securities) of the Company held by Participant (other than those included in the registration) for a period specified by the representative of the underwriters of Common Stock (or other securities) of the Company not to exceed one hundred and eighty (180) days following the effective date of any registration statement of the Company filed under the Securities Act (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto).

Participant agrees to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriter which are consistent with the foregoing or which are necessary to give further effect thereto. In addition, if requested by the Company or the representative of the underwriters of Common Stock (or other securities) of the Company, Participant shall provide, within ten (10) days of such request, such information as may be required by the Company or such representative in connection with the completion of any public offering of the Company's securities pursuant to a registration statement filed under the Securities Act. The obligations described in this Section II.4 shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a Commission Rule 145 transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions with respect to the shares of Common Stock (or other securities) subject to the foregoing restriction until the end of said one hundred and eighty (180) day (or other) period. Participant agrees that any transferee of the Option or shares acquired pursuant to the Option shall be bound by this Section 4.

5. Method of Payment. Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of the Participant:

(a) cash or check (denominated in United States dollars);

(b) wire transfer (denominated in United States dollars); or

(c) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan (which shall include, without limitation, the ability to net exercise the Option).

6. Restrictions on Exercise. This Option may not be exercised until such time as the Plan has been approved by the stockholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any Applicable Law.

7. Non-Transferability of Option.

(a) This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Participant only by Participant. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of Participant.

(b) Further, until the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, or after the Administrator determines that it is, will, or may no longer be relying upon the exemption from registration of Options under the Exchange Act as set forth in Rule 12h-1(f) promulgated under the Exchange Act (the "Reliance End Date"), Participant shall not transfer this Option or, prior to exercise, the Shares subject to this Option, in any manner other than (i) to persons who are "family members" (as defined in Rule 701(c)(3) of the Securities Act of 1933, as amended) through gifts or domestic relations orders, or (ii) to an executor or guardian of Participant upon the death or Disability of Participant. Until the Reliance End Date, the Options and, prior to exercise, the Shares subject to this Option, may not be pledged, hypothecated or otherwise transferred or disposed of, including by entering into any short position, any "put equivalent position" or any "call equivalent position" (as defined in Rule 16a-1(h) and Rule 16a-1(b) of the Exchange Act, respectively), other than as permitted in clauses (i) and (ii) of this paragraph.

8. Term of Option. This Option may be exercised only within the term set out in the Notice of Stock Option Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option.

9. Withholding and Responsibility for Tax-Related Items.

Participant hereby acknowledges and agrees that the ultimate liability for any and all tax, social insurance and payroll tax withholding ("Tax-Related Items") is and remains, to the extent provided for by law, his or her responsibility and liability and that his or her employer, the Company and its Subsidiaries (a) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Option grant, including the grant, vesting or exercise of the Option and the subsequent sale of Shares acquired pursuant to such exercise; and (b) do not commit to structure the terms of the grant or any aspect of the Option to reduce or eliminate his or her liability for Tax-Related Items.

Participant agrees that prior to exercise of the Option or sale of the Share(s) acquired thereunder, he or she shall pay or make adequate arrangements satisfactory to the Company and/or his or her employer, as applicable, to satisfy all withholding obligations of the Company and/or his or her employer. Participant acknowledges and agrees that the Company may refuse to honor the exercise of the Option and refuse to deliver the Shares if such withholding amounts are not delivered at the time of exercise or related sale. In this regard, Participant authorizes the Company and/or his or her employer (be it through the intermediary of the broker or otherwise) to withhold all applicable Tax-Related Items legally payable by him or her from his or her wages or other cash compensation paid to him or her by the Company and/or his or her employer, or from proceeds of sale. Alternatively, or in addition, Participant agrees and acknowledges that the Company may sell or arrange for the sale of Shares that Participant is due to acquire with respect to the Option to meet the minimum withholding

obligation for Tax-Related Items. Any estimated withholding which is not required in satisfaction of any Tax-Related Items shall be repaid to Participant by the Company or his or her employer, as applicable. Finally, Participant agrees that he or she shall pay to the Company or his or her employer, as applicable, any amount of any Tax-Related Items that the Company and/or his or her employer may be required to withhold as a result of his or her participation in the Plan or his or her exercise of the Option or sale of Shares acquired thereunder that cannot be satisfied by the means previously described. In the event that the Options under the Plan are subsequently disqualified for purposes of French tax law, Participant agrees to submit immediately the amount of any income tax withholding and/or Participant's social security contributions due by means of check, cash or credit transfer. In addition, Participant grants the Company or his/her employer the right to require the broker to withhold sufficient amounts from the sale proceeds to meet the Tax-Related Items withholding obligations.

Participant's employer or the Company may withhold Shares owed to Participant at the time of exercise in order to meet the tax and/or social insurance charges that might be due on behalf of Participant at the time of sale of the underlying Shares. Upon sale of the underlying Shares, Participant authorizes his/her employer or the Company to withhold, or request the broker to withhold, from the proceeds to be paid to Participant the amount necessary to satisfy the Tax-Related Items due on behalf of Participant at the time of exercise of the Option and/or sale of the Shares acquired thereunder. If such amounts are due and are not withheld, Participant shall agree to submit the amount due to the Company, his or her employer or the appropriate tax authorities by check, cash or credit transfer upon request.

Participant also agrees that in the hypothesis he/she breaches any obligation set forth in the Plan, or this Option Agreement, the damages that shall be suffered by his/her employer and/or the Company shall be no less than the amount of the taxes and social security contributions (employer's and Participant's part) applicable to the related Options or Shares acquired thereunder, which minimum amount shall therefore be withheld by his/her employer, the Company or the broker as damages, notwithstanding any further action from his/her employer and or the Company against Participant.

10. Acknowledgements.

(a) Participant acknowledges receipt of a copy of the Plan (including any applicable appendixes thereunder) and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Participant has reviewed the Plan (including any applicable appendixes thereunder) and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Participant further agrees to notify the Company upon any change in the residence address indicated below.

(b) The Company (and not Participant's employer) is granting the Option. The Company will administer the Plan from outside Participant's country of residence and that United States of America law will govern all Options granted under the Plan.

(c) That benefits and rights provided under the Plan are wholly discretionary and, although provided by the Company, do not constitute regular or periodic payments. The benefits and rights provided under the Plan are not to be considered part of Participant's salary or compensation for purposes of calculating any severance, resignation, redundancy or other end of service payments, vacation, bonuses, long-term service awards, indemnification, pension or retirement benefits, or any other payments, benefits or rights of any kind. Participant waives any and all rights to compensation or damages as a result of the termination of employment with the Company for any reason whatsoever insofar as those rights result or may result from:

(i) the loss or diminution in value of such rights under the Plan, or

(ii) Participant ceases to have any rights under, or ceases to be entitled to any rights under the Plan as a result of such termination.

(d) The grant of the Option, and any future grant of Options under the Plan is entirely voluntary, and at the complete discretion of the Company. Neither the grant of the Option nor any future grant of an Option by the Company will be deemed to create any obligation to grant any further Options, whether or not such a reservation is explicitly stated at the time of such a grant. The Company has the right, at any time to amend, suspend or terminate the Plan.

(e) The Plan will not be deemed to constitute, and will not be construed by Participant to constitute, part of the terms and conditions of employment, and that the Company will not incur any liability of any kind to Participant as a result of any change or amendment, or any cancellation, of the Plan at any time.

(f) Participation in the Plan will not be deemed to constitute, and will not be deemed by Participant to constitute, an employment or labor relationship of any kind with the Company.

(g) By entering into this Option Agreement, and as a condition of the grant of the Option, Participant consents to the collection, use, and transfer of personal data as described in this subsection to the full extent permitted by and in full compliance with Applicable Law.

(i) Participant understands that the Company and its Subsidiaries hold certain personal information about the Participant, including, but not limited to, name, home address and telephone number, date of birth, social insurance number, salary, nationality, job title, any Shares or directorships held in the Company, details of all Options or other entitlement to Shares awarded, canceled, exercised, vested, unvested, or outstanding in Participant's favor, for the purpose of managing and administering the Plan ("Data").

(ii) Participant further understands that the Company and/or its Subsidiaries will transfer Data among themselves as necessary for the purposes of implementation,

administration, and management of Participant's participation in the Plan, and that the Company and/or its Subsidiary may each further transfer Data to any third parties assisting the Company in the implementation, administration, and management of the Plan ("Data Recipients").

(iii) Participant understands that these Data Recipients may be located in Participant's country of residence or elsewhere, such as the United States. Participant authorizes the Data Recipients to receive, possess, use, retain, and transfer Data in electronic or other form, for the purposes of implementing, administering, and managing Participant's participation in the Plan, including any transfer of such Data, as may be required for the administration of the Plan and/or the subsequent holding of Shares on Participant's behalf, to a broker or third party with whom the Shares acquired on exercise may be deposited.

(iv) Participant understands that Participant may, at any time, review the Data, request that any necessary amendments be made to it, or withdraw Participant's consent herein in writing by contacting the Company. Participant further understands that withdrawing consent may affect Participant's ability to participate in the Plan.

(h) Participant has received the terms and conditions of this Option Agreement and any other related communications, and Participant consents to having received these documents in English. **Je reconnais expressément par les présentes, que je comprends et parle parfaitement la langue anglaise, que j'ai eu le temps nécessaire pour entièrement lire et parfaitement comprendre le présent contrat ainsi que l'ensemble des documents et annexes s'y afférant et que j'ai eu l'opportunité de m'en entretenir avec les conseils de mon choix.** (*I represent that I perfectly speak and understand the English language, that I had enough time to review and understand this agreement as all the related documents and appendix and that I had the opportunity to obtain advice from the counsels of my choice).*

11. Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant's interest except by means of a writing signed by the Company and Participant. This Option Agreement is governed by the internal substantive laws but not the choice of law rules of California.

12. No Guarantee of Continued Service. PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER. PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THIS OPTION AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT

AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH PARTICIPANT'S RIGHT OR THE RIGHT OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) TO TERMINATE PARTICIPANT'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

Participant acknowledges receipt of a copy of the Plan (including Appendix B attached thereto) and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Option in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Participant further agrees to notify the Company upon any change in the residence address indicated below.

PARTICIPANT	FLUIDIGM CORPORATION
_____	_____
Signature	By
_____	Gajus V. Worthington
Print Name	Print Name
_____	President, Chief Executive Officer
	Title
_____	
Residence Address	

EXHIBIT A

2009 EQUITY INCENTIVE PLAN

EXERCISE NOTICE

Fluidigm Corporation
7000 Shoreline Court, Suite 100
South San Francisco, CA 94080

Attention: Stock Plan Administrator

1. Exercise of Option. Effective as of today, _____, _____, the undersigned ("Participant") hereby elects to exercise Participant's option (the "Option") to purchase _____ shares of the Common Stock (the "Shares") of Fluidigm Corporation (the "Company") under and pursuant to the 2009 Equity Incentive Plan, including any applicable appendices thereunder (collectively, the "Plan"), and the Stock Option Agreement dated «GrantDate» (the "Option Agreement").

2. Delivery of Payment. Participant herewith delivers to the Company the full purchase price of the Shares, as set forth in the Option Agreement. Should any tax or social contribution be due by the Company or Participant's employer) due to the exercise of the Option or the disposition of the Shares, Participant hereby agrees that the corresponding amount may be withheld on the proceeds due to Participant from any sale of the Shares by the broker previously selected by the Company to be used by Participant and such amount shall be directly paid to the Company so that the Company may pay the relevant taxing authorities any amounts due.

3. Representations of Participant. Participant acknowledges that Participant has received, read and understood the Plan and the Option Agreement and agrees to abide by and be bound by their terms and conditions.

4. Rights as Stockholder. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Common Stock subject to an Award, notwithstanding the exercise of the Option. The Shares shall be issued to Participant as soon as practicable after the Option is exercised in accordance with the Option Agreement. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance except as provided in Section 13 of the Plan.

5. Company's Right of First Refusal. Before any Shares held by Participant or any transferee (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section 5 (the "Right of First Refusal").

(a) Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares (the "Offered Price"), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

(b) Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection 8 below.

(c) Purchase Price. The purchase price ("Purchase Price") for the Shares purchased by the Company or its assignee(s) under this Section 5 shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

(d) Payment. Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within thirty (30) days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(e) Holder's Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section 5, then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, *provided* that such sale or other transfer is consummated within one hundred and twenty (120) days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section 5 shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(f) Exception for Certain Family Transfers. Anything to the contrary contained in this Section 5 notwithstanding, the transfer of any or all of the Shares during the Participant's lifetime or on the Participant's death by will or intestacy to the Participant's immediate family or a trust for the benefit of the Participant's immediate family shall be exempt from the provisions of this Section 5. "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section 5, and there shall be no further transfer of such Shares except in accordance with the terms of this Section 5.

(g) Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the earlier of (i) the first sale of Common Stock of the Company to the general public, or (ii) a Change in Control in which the successor corporation has equity securities that are publicly traded.

6. Tax Consultation. Participant understands that Participant may suffer adverse tax consequences as a result of Participant's purchase or disposition of the Shares. Participant represents that Participant has consulted with any tax consultants Participant deems advisable in connection with the purchase or disposition of the Shares and that Participant is not relying on the Company for any tax advice.

7. Restrictive Legends and Stop-Transfer Orders.

(a) Legends. Participant understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND A RIGHT OF FIRST REFUSAL HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE EXERCISE NOTICE BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE MAY NOT BE TRANSFERRED, ASSIGNED OR HYPOTHECATED IN ANY MANNER OTHER THAN BY WILL OR BY THE LAWS OF DESCENT OR DISTRIBUTION BEFORE THE DATE THREE (3) YEARS AFTER THE INITIAL EXERCISE DATE, AS SUCH TERM IS DEFINED IN THE STOCK OPTION AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER FOR A PERIOD OF TIME FOLLOWING THE EFFECTIVE DATE OF THE UNDERWRITTEN PUBLIC OFFERING OF THE COMPANY'S SECURITIES SET FORTH IN AN AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES AND MAY NOT BE SOLD OR OTHERWISE DISPOSED OF BY THE HOLDER PRIOR TO THE EXPIRATION OF SUCH PERIOD WITHOUT THE CONSENT OF THE COMPANY OR THE MANAGING UNDERWRITER.

(b) Stop-Transfer Notices. Participant agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Exercise Notice or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

8. Successors and Assigns. The Company may assign any of its rights under this Exercise Notice to single or multiple assignees, and this Exercise Notice shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Exercise Notice shall be binding upon Participant and his or her heirs, executors, administrators, successors and assigns.

9. Interpretation. Any dispute regarding the interpretation of this Exercise Notice shall be submitted by Participant or by the Company forthwith to the Administrator, which shall review such dispute at its next regular meeting. The resolution of such a dispute by the Administrator shall be final and binding on all parties.

10. Governing Law; Severability. This Exercise Notice is governed by the internal substantive laws, but not the choice of law rules, of California. In the event that any provision hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Exercise Notice shall continue in full force and effect.

11. Entire Agreement. The Plan and Option Agreement are incorporated herein by reference. This Exercise Notice, the Plan, the Option Agreement and the Investment Representation Statement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant's interest except by means of a writing signed by the Company and Participant.

Je reconnais expressément par les présentes, que je comprends et parle parfaitement la langue anglaise, que j'ai eu le temps nécessaire pour entièrement lire et parfaitement comprendre le présent contrat ainsi que l'ensemble des documents et annexes s'y afférant et que j'ai eu l'opportunité de m'en entretenir avec les conseils de mon choix. *(I represent that I perfectly speak and understand the English language, that I had enough time to review and understand this agreement as all the related documents and appendix and that I had the opportunity to obtain advice from the counsels of my choice).*

Submitted by:
PARTICIPANT

Signature

Print Name

Address:

Accepted by:
FLUIDIGM CORPORATION

By

Print Name

Title

Address:

Date Received

EXHIBIT B

FLUIDIGM CORPORATION

2009 EQUITY INCENTIVE PLAN

ESCROW PROVISIONS — FRENCH EMPLOYEES

1. Option. As set forth in the Notice of Stock Option Grant, you have been granted the Option under the Plan. The Shares acquired upon exercise of the Option shall be held by the Company under these Escrow Provisions in an account in your name.

2. Legal and Equitable Title. Legal and equitable title to the Option and any cash or securities acquired pursuant thereto, shall remain with you at all times, notwithstanding that such items may be held by the Company pursuant to these Escrow Provisions.

3. Exercise of Option. You may instruct the Company to exercise the Option on your behalf at such time or times as permitted by the Notice of Stock Option Grant, the Stock Option Agreement and the Plan.

4. Proceeds of Exercise. Shares acquired upon exercise of the Option shall be held by the Company under these Escrow Provisions until the date three (3) years from the Initial Exercise Date (the "Holding Period"); provided, however, that the duration of this restriction on sale shall be automatically adjusted to conform with any changes to the holding period required for favorable tax and social security treatment under Applicable Laws, as defined in the Plan. Upon the expiration of the Holding Period, you may elect to keep the Shares in your account under these Escrow Provisions or have them distributed to you as soon as administratively feasible. You may elect to keep any proceeds from any sale of such Shares, made following the expiration of the Holding Period, in your account under these Escrow Provisions or to have them distributed to you within ten (10) business days of the sale, pursuant to such channels as the Company reasonably determines appropriate.

5. Powers of Company. The Company may take any and all actions, and is hereby granted such powers and discretion, as may appear necessary or proper to comply with the Applicable Laws and to effectuate and carry out the terms and purposes of these Escrow Provisions, including, but not limited to, the power to exercise the Option and hold or dispose of the proceeds of such exercise in accordance with the terms of these Escrow Provisions.

6. Limitation of Liability. The Company shall not be liable for any damage caused by the exercise of its discretion as authorized by these Escrow Provisions for any reason, except gross negligence or willful misconduct. The Company shall not be liable for honest mistakes of judgment or for losses or liabilities due to such honest mistakes of judgment.

7. Costs and Expenses of this Escrow. All costs and expenses of these Escrow Provisions shall be borne by the Company.

8. Governing Law. These Escrow Provisions shall be administered in the State of California, and its validity, construction and all rights hereunder, shall be governed by the laws of the State of California; provided, however, that all matters affecting the title, ownership and transferability of any security, whether created or held hereunder, shall be governed by all applicable federal, state, or foreign securities laws.

PARTICIPANT	FLUIDIGM CORPORATION
Signature	By
Print Name	Name
	Title
Residence Address	

EXHIBIT C

INVESTMENT REPRESENTATION STATEMENT

PARTICIPANT :

COMPANY : FLUIDIGM CORPORATION

SECURITY : COMMON STOCK

AMOUNT : _____

DATE : _____

In connection with the purchase of the above-listed Securities, the undersigned Participant represents to the Company the following:

(a) Participant is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Participant is acquiring these Securities for investment for Participant's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Participant acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Participant's investment intent as expressed herein. In this connection, Participant understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Participant's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one (1) year or any other fixed period in the future. Participant further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Participant further acknowledges and understands that the Company is under no obligation to register the Securities. Participant understands that the certificate evidencing the Securities shall be imprinted with any legend required under applicable state securities laws.

(c) Participant is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Option to Participant, the exercise shall be exempt from registration under the

Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701 may be resold, subject to the satisfaction of the applicable conditions specified by Rule 144, including in the case of affiliates (1) the availability of certain public information about the Company, (2) the amount of Securities being sold during any three (3) month period not exceeding specified limitations, (3) the resale being made in an unsolicited "broker's transaction", transactions directly with a "market maker" or "riskless principal transactions" (as those terms are defined under the Securities Exchange Act of 1934) and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Option, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which may require (i) the availability of current public information about the Company; (ii) the resale to occur more than a specified period after the purchase and full payment (within the meaning of Rule 144) for the Securities; and (iii) in the case of the sale of Securities by an affiliate, the satisfaction of the conditions set forth in sections (2), (3) and (4) of the paragraph immediately above.

(d) Participant further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption shall be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 shall have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Participant understands that no assurances can be given that any such other registration exemption shall be available in such event.

PARTICIPANT

_____
Signature

_____
Print Name

_____
Date

Exhibit 10.5

2020.LICI.001.B
California Institute of Technology

SECOND AMENDED AND RESTATED LICENSE AGREEMENT

THIS SECOND AMENDED AND RESTATED LICENSE AGREEMENT ("Agreement"), effective May 1, 2000 (the "Effective Date") with a second restatement date as of May 1, 2004 (the "Second Restatement Date"), between **CALIFORNIA INSTITUTE OF TECHNOLOGY** , 1200 East California Boulevard, Pasadena, California 91125 ("Caltech") and **FLUIDIGM CORPORATION** , 7100 Shoreline Court, South San Francisco, California 94080 (formerly Mycometrix Corporation) ("Licensee").

WHEREAS, Caltech has been engaged in basic research in the field of microfluidics;

WHEREAS, that research led to the United States patents, patent applications and other inventions listed in Exhibit A, which are owned, solely or jointly, by Caltech;

WHEREAS, Licensee is desirous of obtaining, and Caltech wishes to grant to Licensee, an exclusive license (or the maximum rights Caltech can grant) to the Licensed Patents (as defined in Section 1.5) and Improvements thereof in the Field (as defined in Sections 1.4 and 1.3, respectively) and an exclusive license to the Technology (as defined in Section 1.9);

WHEREAS, the Caltech and Licensee have entered into a prior License Agreement made as of May 1, 2000, and an Amended and Restated License Agreement made as of June 1, 2002, which the parties now wish to further amend and restate as set forth herein.

NOW, THEREFORE, the parties agree as follows:

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

ARTICLE 1

DEFINITIONS

1.1 **"Affiliate"** shall mean, with respect to Licensee, any entity which controls, is controlled by or is under common control with Licensee. An entity shall be regarded as in control of another entity for purposes of this definition if it owns or controls fifty percent (50%) or more of the shares of the subject entity entitled to vote in the election of directors (or, in the case of an entity that is not a corporation, for the election of the corresponding managing authority). "Affiliate" shall mean, with respect to Caltech, any research entity which is operated or managed as a facility under Caltech.

1.2 **"Deductible Expenses"** means (i) all trade, cash and quantity credits, discounts, refunds or government rebates; (ii) amounts for claims, allowances or credits for returns, retroactive price reductions, or chargebacks; (iii) packaging, handling fees and prepaid freight, sales taxes, duties and other governmental charges (including value added tax); and (iv) provisions for uncollectible accounts determined in accordance with reasonable accounting practices, consistently applied to all products of the selling party. For the removal of doubt, Net Sales shall not include sales by Licensee to its Affiliates for resale, provided that if Licensee sells a Licensed Product to an Affiliate for resale, Net Sales shall include the amounts invoiced by such Affiliate to third parties on the resale of such Licensed Product. In the event that Licensee grants a sublicense hereunder, and receives payments based upon the Sublicensee's sales of Licensed Products, Licensee may upon notice to Caltech modify this definition of "Net Sales" for purposes of calculating royalties payable to Caltech on such Sublicensee's sales to be the same as the definition of "Net Sales" on which such royalties to Licensee are calculated.

1.3 **"Field"** means [***]

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[***]

1.4 **"Improvements"** shall mean all Caltech rights (whether or not Caltech has sole or joint rights) in any improvement or invention conceived and reduced to practice or otherwise developed in or arising from research in the Field as conducted by Dr. Stephen Quake, researchers of the Quake laboratory, or in collaboration with members of the Frances Arnold or Axel Scherer laboratories, whether invented solely by Caltech researchers or jointly with (i) Licensee or (ii) other researchers without an obligation of assignment to Caltech.

1.5 **"Licensed Patents"** means the patent applications listed in Exhibit A hereto; any patents issuing on such patent applications, all divisionals, continuations, continuations-in-part, patents of addition, substitutions, registrations, reissues, reexaminations or extensions of any kind with respect to any of the existing patents and any foreign counterparts of such patent applications and patents, and Improvements.

1.6 **"Licensed Product"** means products covered by a Valid Claim of a Licensed Patent in the country in which such product is sold or products in which the Technology is utilized.

1.7 **"Net Sales"** means the total amount invoiced to third parties on sales of Licensed Products for which royalties are due under Article 4 below, less, to the extent allocable to such invoiced amounts, Deductible Expenses.

1.8 **"Sublicensee"** shall mean any non-Affiliate third party to whom Licensee has granted the right under the Licensed Patents and Technology to manufacture and sell Licensed Products, with respect to Licensed Products made and sold by such third party.

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1.9 **"Technology"** means all proprietary information, know-how, procedures, methods, prototypes, designs, technical data, reports, and data owned by Caltech that are necessary or useful in the development of products in the Field covered by any issued patent or pending patent application within the Licensed Patents, and which relate to such products.

1.10 **"Valid Claim"** means a claim of an issued and unexpired patent or a claim of a pending patent application within the Licensed Patents which has not been held unpatentable, invalid or unenforceable by a court or other government agency of competent jurisdiction and has not been admitted to be invalid or unenforceable through reissue, re-examination, disclaimer or otherwise; provided, however, that if the holding of such court or agency is later reversed by a court or agency with overriding authority, the claim shall be reinstated as a Valid Claim with respect to Net Sales made after the date of such reversal. Notwithstanding the foregoing provisions of this Section 1.10, if a claim of a pending patent application within the Licensed Patents has not issued as a claim of an issued patent within the Licensed Patents, within five (5) years after the filing date from which such claim takes priority, such pending claim shall not be a Valid Claim for purposes of this Agreement.

ARTICLE 2

PATENT LICENSE GRANT

2.1 Caltech hereby grants to Licensee an exclusive, royalty-bearing, worldwide license, with the right to grant and authorize sublicenses, under the Licensed Patents and Technology to make, have made, use, import, offer for sale and sell Licensed Products, practice any method or procedure and otherwise exploit the Licensed Patents and Technology.

2.2 These licenses are subject to: (a) the reservation of Caltech's right to make, have made, and use Licensed Products for noncommercial educational and research purposes, but not for sale or other distribution to third parties; and (b) the rights of the U.S. Government under Title 35, United States Code, Section 200 et seq., including but not limited to the grant to the U.S. government of a nonexclusive, nontransferrable, irrevocable, paid-up license to practice or have practiced any invention conceived or first actually reduced to practice in the performance of work for or on behalf of the U.S. Government throughout the world. These licenses are not

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transferable by Licensee except as provided in Section 16.4, but Licensee shall have the right to grant non-exclusive or exclusive sublicenses hereunder, provided that:

(a) License shall include all its sublicensing income in Licensee's reports to Caltech, as provided in Section 9.2, and Licensee shall pay royalties thereon to Caltech pursuant to Section 4.2 and 4.4;

(b) Licensee shall furnish Caltech within thirty (30) days of the execution thereof, a true and complete copy of each sublicense and any changes or additions thereto;

(c) License may grant sublicenses of no greater scope than the license granted under Section 2.1; and

Each sublicense granted by Licensee shall include provisions similar in all material respects to those of Articles 6, 12, 15, 16 and Section 2.2.

ARTICLE 3

IMPROVEMENTS

3.1 The parties acknowledge that Exhibit A includes all Improvements disclosed by Caltech to Licensee between May 1, 2000 and the Second Restatement Date, and elected by Licensee as of the Second Restatement Date. Caltech shall notify Licensee in writing of Improvements made after the Second Restatement Date and during the term of the Agreement. Upon receipt of an invention disclosure constituting an Improvement, Licensee can elect to add such Improvement and any related patent filings to Exhibit A hereof to be within the Licensed Patents. Thereafter, Licensee shall be responsible for patent prosecution and costs associated with such elected Improvement in accordance with Article 11 herein, as well as to issue additional stock pursuant to Section 5.3. No less than at each anniversary of the Second Restatement Date, Exhibit A shall be updated by the parties to reflect the inclusion of all Improvements so elected, as well as updates on all Licensed Patents.

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ARTICLE 4

ROYALTIES

4.1 With respect to Licensed Products manufactured or sold by Licensee in a country in which such manufacture or sale is covered by a Valid Claim of a Licensed Patent, Licensee agrees to pay Caltech [***] of Net Sales of such Licensed Products wherein the Licensed Products are instruments or apparatus directly used for the reading and/or analysis of data from other Licensed Products, including microfluidic chips that are Licensed Products, and [***] of Net Sales of Licensed Products by Licensee for all such other Licensed Products, including microfluidic chips that are Licensed Products, Royalties due under this Section 4.1 shall be payable on a country-by-country and Licensed Product-by-Licensed Product basis until the expiration of the last-to-expire issued Valid Claim covering such Licensed Product in such country.

4.2 With respect to Licensed Products manufactured or sold by Sublicensees in a country in which such manufacture or sale is covered by a Valid Claim of a Licensed Patent, Licensee agrees to pay Caltech [***] of the revenues received by Licensee from Sublicensees' Net Sales of such Licensed Products wherein the Licensed Products are instruments or apparatus directly used for the reading and/or analysis of data from other Licensed Products, including microfluidic chips that are Licensed Products, and [***] of the revenues received by Licensee from Sublicensees' Net Sales of Licensed Products for all such other Licensed Products, including microfluidic chips that are Licensed Products. Royalties due under this Section 4.2 shall be payable on a country-by-country and Licensed Product-by-Licensed Product basis until the expiration of the last-to-expire issued Valid Claim covering such Licensed Product in such country.

4.3 With respect to Licensed Products manufactured or sold by Licensee in a country in which such manufacture or sale is not covered by Valid Claim of a Licensed Patent but the Technology is utilized, Licensee agrees to pay Caltech [***] of Net Sales of such Licensed Products by Licensee, wherein the Licensed Products are instruments or

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apparatus directly used for the reading and/or analysis of data from other Licensed Products, including microfluidic chips that are Licensed Products, and [***] of Net Sales of Licensed Products by Licensee for all such other Licensed Products, including microfluidic chips that are Licensed Products. Royalties due under this Section 4.3 shall be payable on a country-by-country and Licensed Product-by-Licensed Product basis for a period of [***] years from the Effective Date or the issuance of a U.S. patent that covers the Licensed Product, whichever first occurs.

4.4 With respect to Licensed Products manufactured or sold by Sublicensees in a country in which such manufacture or sale is not covered by a Valid Claim of a Licensed Patent but the Technology is utilized, Licensee agrees to pay Caltech [***] of the revenues received by Licensee from Sublicensees' Net Sales of such Licensed Products wherein the Licensed Products are instruments or apparatus directly used for the reading and/or analysis of data from other Licensed Products, including microfluidic chips that are Licensed Products, and [***] of the revenues received by Licensee from Sublicensees' Net Sales of Licensed Products for all such other Licensed Products, including microfluidic chips that are Licensed Products. Royalties due under this Section 4.4 shall be payable on a country-by-country and Licensed Product-by-Licensed Product basis for a period of [***] years from the Effective Date or the issuance of a U.S. patent that covers the Licensed Product, whichever first occurs.

4.5 Notwithstanding the above, it is understood and agreed that Caltech shall not be entitled to any share of amounts received by Licensee for equity, debt, pilot studies, to support research or development activities to be undertaken by Licensee, research and development or other performance based milestones, the achievement by Licensee or Sublicensee of specified milestones or benchmarks relating to the development of Licensed Products, the license or sublicense of any intellectual property other than the Licensed Patents, reimbursement for patent or other expenses, or with respect to products other than Licensed Products.

4.6 In the event that a Licensed Product is sold in combination with one or more other products or other items that are not Licensed Products, Net Sales for such combination products will be reasonably calculated on a country-by-country and Licensed Product-by-Licensed

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Product basis by Licensee by multiplying the Net Sales of that combination by a fraction equal to the relative value of the combination attributable to the Licensed Product, in relation to the relative value of the combination, as reasonably determined by Licensee in good faith. In addition, in the event that a Licensed Product is not sold in combination with one or more other products or other items that are not Licensed Products, but instead comprises multiple components, some of which would constitute a Licensed Product if sold separately (each, a "Licensed Component"), and the others would not constitute a Licensed Product if sold separately, then Net Sales for such Licensed Product will be calculated by multiplying the Net Sales of such Licensed Product by the fraction A/B, where A is the gross selling price of the Licensed Component sold separately and B is the gross selling price of such Licensed Product. If no such separate sales are made by Licensee, its Affiliate or Sublicensee, Net Sales for such Licensed Product shall be calculated by multiplying Net Sales of such Licensed Product by the fraction C/(C+D), where C is the fully allocated cost of the Licensed Component and D is the fully allocated cost of the other components.

4.7 Commencing on January 1, 2004, and continuing for each anniversary thereof during the term of this Agreement, if Licensee has not paid, during the preceding calendar year, a minimum of [***] in royalties under Sections 4.1, 4.2, 4.3, and 4.4, Licensee agrees to pay, on or before March 1 of that calendar year, an additional royalty for the prior calendar year equal to the difference between [***] and any lower amount paid under Sections 4.1, 4.2, 4.3, and 4.4 for the prior calendar year.

4.8 In the event Licensee or Sublicensee becomes obligated to pay amounts to a third party with respect to a Licensed Product for patent rights of a third party, Licensee may deduct [***] of the amounts owing to such third party (prior to reductions) from the amount owing to Caltech for such Licensed Product; provided, however, the amounts otherwise due to Caltech shall not be so reduced by more than [***].

4.9 For the purpose of determining royalties payable under this Agreement, any royalties or other revenues Licensee receives from Sublicensees in currencies other than U.S. dollars and any Net Sales denominated in currencies other than U.S. dollars shall be converted

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into U.S. dollars according to Licensee's reasonable standard internal conversion procedures, including Licensee's standard internal rates and conversion schedule.

4.10 No more than one royalty payment shall be due with respect to a sale of a particular Licensed Product. No multiple royalties shall be payable because any Licensed Product, or its manufacture, sale or use is covered by more than one Valid Claim in a given country. No royalty shall be payable under this Article 4 with respect to Licensed Products distributed for use in research and/or development or as promotional samples or otherwise distributed without charge to third parties.

4.11 Any sublicenses granted by Licensee, including, without limitation, any nonexclusive sublicenses, shall remain in effect in the event this license terminates pursuant to Article 12; provided, the financial obligations of each Sublicensee to Caltech shall be limited to the amounts Licensee shall be obligated to pay Caltech for the activities of such Sublicensee pursuant to this Agreement.

4.12 Royalties due under this Article 4 shall be payable on a country-by-country and Licensed Product-by-Licensed Product basis until the expiration of the last-to-expire issued Valid Claim covering such Licensed Product in such country, if the manufacture or sale of such Licensed Product was at the time of the first commercial sale in such country covered by a Valid Claim. Otherwise, royalties due under this Article 4 shall be payable on a country-by-country and Licensed Product-by-Licensed Product basis until [***] whichever first occurs.

4.13 Notwithstanding the provisions of this Article 4, no royalty shall be payable to Caltech with respect to any sales of Licensed Products to the U.S. Government on sales made solely to permit the U.S. Government to practice or have practiced or have practiced or sue on its behalf any invention or process covered by the Licensed Patents.

ARTICLE 5

LICENSEE EQUITY INTEREST

5.1 In accordance with the License Agreement of May 1, 2000, Licensee issued to Caltech, in consideration of Licensee's receipt of the intangible property rights granted under

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that License Agreement (which rights are carried forward herein), [***] shares of common stock of Licensee, pursuant to the terms of a reasonable and customary stock issuance agreement. Further, it is acknowledged that, as partial consideration for entering into the first Amended and Restated License Agreement of June 1, 2002, with the reformation of the initial License Agreement of May 1, 2000 and the associated restatements and amendments (including, but not limited to, an updated Exhibit A), Licensee issued to Caltech [***] shares of common stock of Licensee.

5.2 Caltech agrees that, in the event of any underwritten or public offering of securities of Licensee or a Affiliate, Caltech shall comply with and agree to any reasonable restriction on the transfer of equity interest, or any part thereof, imposed by an underwriter, and shall perform all acts and sign all necessary documents required with respect thereto.

5.3 If Licensee wishes at its sole discretion to license hereunder any Improvements disclosed by Caltech to Licensee during a twelve (12) month period beginning with June 1, 2003, and for each anniversary thereafter (each twelve month period will be referred to as an “Improvement Period”), Licensee shall notify Caltech in writing accordingly within thirty (30) days after the end of each Improvement Period. For the first two (2) Improvement Periods, Licensee agrees to issue to Caltech, in consideration of Licensee’s election to receive additional intangible property rights to all Improvements disclosed to Licensee during an Improvement Period, [***] shares of common stock of Licensee, pursuant to the terms of a reasonable and customary stock issuance agreement. Thereafter, Licensee is hereby granted an option by Caltech that Licensee can exercise during the final year of the first two (2) Improvement Period on an annual basis on the same terms and conditions. The consideration of this option was partially paid by the [***] shares granted by Licensee to Caltech as referenced in Section 5.1 of this Agreement. Further, it is acknowledged that pursuant to the initial License Agreement of May 1, 2000 and the first Amended and Restated License Agreement of June 1, 2002, Licensee elected to receive additional intangible property rights to Improvements disclosed to Licensee by Caltech during May 1, 2000 through May 31, 2003, in consideration of the issuance to Caltech by Licensee of [***] shares of common stock of Licensee (which represents the [***] share grant under Section 5.1 above and [***] shares pursuant to the parties’

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Letter Agreement dated June 19, 2003, paragraph #3), receipt of which shares Caltech hereby acknowledges.

ARTICLE 6

DUE DILIGENCE

6.1 Licensee agrees to use commercially reasonable efforts to introduce commercial Licensed Product(s) as soon as practical, consistent with sound and reasonable business practices and judgments. Licensee shall be deemed to have satisfied its obligations under this Section if Licensee has an ongoing and active research program or marketing program, as appropriate, directed toward production and use of one or more Licensed Products. Any efforts of Licensee's Sublicensees shall be considered efforts of Licensee for the sole purpose of determining Licensee's compliance with its obligation under this Section.

6.2 After the first year from the Effective Date, Caltech shall have the right, no more often than once each year, to require Licensee to report to Caltech in writing on its progress in introducing commercial Licensed Product(s) in the United States.

6.3 If Licensee is not fulfilling its obligations under Section 6.1 with respect to the Field and Caltech so notifies Licensee in writing, Caltech and Licensee shall negotiate in good faith any additional efforts to be taken by Licensee. If the parties do not reach agreement within ninety (90) days, the parties shall submit the issue to arbitration as provided in Article 14 to determine whether any additional efforts shall be required of Licensee. If subsequent to the conclusion of such arbitration proceedings Licensee then fails to make any required efforts, and does not remedy that failure within sixty (60) days after further written notice to Licensee, Caltech may convert the license granted in Section 2.1 to a nonexclusive license in any part of the Field in which Licensee is not fulfilling its obligations under Section 6.1, and the royalties payable under this Agreement shall be reduced by [***] for Licensed Products in the Field sold under such a nonexclusive license.

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ARTICLE 7

INFRINGEMENT BY THIRD PARTY

7.1 Both Caltech and Licensee agree to notify the other in writing should either party become aware of infringement of the Licensed Patents. Licensee, upon notice to Caltech, shall have the sole right to initiate an action against the infringer at Licensee's expense, either in Licensee's name or in Caltech's name if so required by law, Licensee shall have sole control of the action.

7.2 If Licensee, its Affiliate or Sublicensee, distributor or other customer is sued by a third party charging infringement of patent rights that dominate a claim of the Licensed Patents or that cover the development, manufacture, use, distribution or sale of a Licensed Product, Licensee will promptly notify Caltech. As between the parties to this Agreement, Licensee shall have sole control of the defense in any such action(s).

7.3 If a declaratory judgment action alleging invalidity unenforceability or noninfringement of any of the Licensed Patents is brought against Licensee and/or Caltech, Licensee may elect to have sole control of the action, and if Licensee so elects it shall bear all the costs of the action. Licensee also may elect to undertake and have sole control of the defense of any interference, opposition or similar action with respect to the Licensed Patents providing it bears all the costs of such action.

7.4 In the event Licensee institutes a legal action pursuant to Section 7.1, within thirty (30) days after receipt of notice of Licensee's intent to institute such legal action, Caltech shall have the right to jointly prosecute such action and to fund up to one-half (1/2) the costs of such action. Caltech shall fully cooperate with and supply all assistance reasonably requested by Licensee, including by using commercially reasonable efforts to have its employees testify when requested and to make available relevant records, papers, information, samples, specimens, and the like. Licensee shall bear the reasonable expenses incurred by Caltech in providing such assistance and cooperation as is requested pursuant to this Section 7.4. Licensee shall keep Caltech reasonably informed of the progress of the legal action, and Caltech shall be entitled to be represented by counsel in connection with such legal action at its own expense. Licensee's

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reasonable and customary expenses for such action (including attorneys' fees and expert fees) shall be fully creditable against royalties owed to Caltech hereunder, provided that in no one year shall such expenses to be credited against more than [***] of royalty payments to Caltech. Any remaining expenses may be carried over and credited against royalties owed in future years.

7.5 Licensee shall have the light to settle any claims, but only upon terms and conditions that are reasonably acceptable to Caltech. Should Licensee elect to abandon such an action other than pursuant to a settlement with the alleged infringer that is reasonably acceptable to Caltech, Licensee shall give timely notice to Caltech who, if it so desires, may continue the action; provided, however, that the sharing of expenses and any recovery in such suit shall be as agreed upon between the parties.

7.6 Any amounts paid to Licensee by third parties as the result of an action pursuant to this Article 7 (such as in satisfaction of a judgment or pursuant to a settlement) shall first be applied to reimbursement of the unreimbursed expenses (including attorneys' fees and expert fees) incurred by Licensee and then to the payment to Caltech of any royalties against which were credited expenses of the action in accordance with Section 7.4. Any remainder shall be divided between the parties as follows:

(a) To the extent the amount recovered reflects lost profits, Licensee shall retain the remainder, less the amount of any royalties that would have been due Caltech on sales of Licensed Product lost by Licensee as a result of the infringement had Licensee made such sales, provided that (i) Licensee shall in any event retain at least [***] of the remainder; and (ii) Caltech shall receive an amount equal to the royalties it would have received if such sales had been made by Licensee, provided such amount shall in no event exceed [***] of the remainder; or

(b) To the extent the amount recovered does not reflect lost profits, such amount shall be shared by Caltech and Licensee pro rata according to the respective percentages of costs borne by each in such action; provided, however, that in no event shall Caltech receive less than twenty-five percent (25%) of such amount.

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ARTICLE 8

BENEFITS OF LITIGATION,

EXPIRATION OR ABANDONMENT

8.1 In a case where one or more patents or particular claims thereof within the Licensed Patents expire, or are abandoned, or are declared invalid or unenforceable or otherwise construed by a court of last resort or by a lower court from whose decree no appeal is taken, or certiorari is not granted within the period allowed therefor, then the effect thereof hereunder shall be:

(a) that such patents or particular claims shall, as of the date of expiration or abandonment or final decision as the case may be, cease to be included within the Licensed Patents for the purpose of this Agreement;

(b) that such construction so placed upon the Licensed Patents by the court shall be followed from and after the date of entry of the decision, and royalties shall thereafter be payable by Licensee only in accordance with such construction; and

(c) In the event that Licensee challenges the validity of Licensed Patents, Licensee may not cease paying royalties as of the date validity of the claims in issue are challenged, but rather may cease paying royalties as to those claims only after a final adjudication of invalidity of those claims.

8.2 In the event that any of the contingencies provided for in Section 8.1 occurs, Caltech agrees to renegotiate in good faith with Licensee a reasonable royalty rate under the remaining Licensed Patents which are unexpired and in effect and under which Licensee desires to retain a License.

ARTICLE 9

RECORDS, REPORTS AND PAYMENTS

9.1 Licensee shall keep records and books of account in respect of all Licensed Products made and sold by Licensee or its Affiliates under this Agreement and of royalties or other revenues Licensee receives from Sublicensees other than Licensee’s Affiliates for the sale

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of Licensed Products. Caltech shall have the right at its own cost, during Licensee's business hours, no more often than annually, to have an independent certified public accounting firm of nationally recognized standing to examine such records and books. Licensee shall keep the same for at least three (3) years after it pays Caltech the royalties due for such Licensed Products and require Licensee's Affiliates to do the same. The accounting firm shall disclose to Caltech only whether or not the reports are correct and the amount of any discrepancies. Caltech shall, and shall cause its accounting firm to, not disclose to any third party any confidential information learned through an examination of such records and books.

9.2 Following the first commercial sale of a Licensed Product, on or before the last day of each February, May, August and November for so long as royalties are payable under this Agreement, Licensee shall render to Caltech a report in writing, setting forth Net Sales and the number of units of Licensed Products sold during the preceding calendar quarter by Licensee and its Affiliates, and the royalties or other revenues received by Licensee from Net Sales of Licensed Products made by Licensee's Sublicensees other than Affiliates during the preceding calendar quarter. Each such report shall also set forth an explanation of the calculation of the royalties payable hereunder and be accompanied by payment of the royalties shown by said report to be due Caltech. Notwithstanding foregoing, if (i) Caltech materially breaches this Agreement, (ii) Licensee gives Caltech written notice of the breach, and (iii) Caltech has not cured the breach by the time a payment is due under this Section, then Licensee may make the required payment into an interest bearing escrow account to be released when the breach is cured, less any damages that may be payable to License by virtue or Caltech's breach. Royalty reports which are not challenged by Caltech or amended by Licensee within thirty-six (36) months after receipt by Caltech shall be conclusively presumed correct and not subject to challenge, audit, or amendment.

ARTICLE 10

CONFIDENTIALITY

10.1 Except as provided herein, each party shall maintain in confidence, and shall not use for any purpose or disclose to any third party, information disclosed by the other party in writing and marked "Confidential" or that is disclosed orally and confirmed in writing as

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confidential within forty-five (45) days following such disclosure (collectively, "Confidential Information"). Confidential Information shall not include any information that is; (i) already known to the receiving party at the time of disclosure hereunder, (ii) now or hereafter becomes publicly known other than through acts or omissions of the receiving party, (iii) disclosed to the receiving party by a third party under no obligation of confidentiality to the disclosing party, (iv) disclosed as required by securities or other applicable laws or pursuant to legal requirement, or (v) disclosed to actual or prospective investors or corporate partners, or to a party's accountants, attorneys, and other professional advisors. All reports provided to Caltech by Licensee pursuant to this Agreement shall be treated as confidential information of Licensee, pursuant to this Section 10.1. The terms of this Agreement shall be treated as confidential information of Licensee, pursuant to this Section 10.1.

10.2 Notwithstanding the provisions of Section 10.1 above, Licensee may use or disclose confidential information comprising the Licensed Patents and Technology to the extent necessary to exercise its rights hereunder (including commercialization and/or sublicensing of the Licensed Patents and Technology) or fulfill its obligations and/or duties hereunder and in filing for, prosecuting or maintaining any proprietary rights, prosecuting or defending litigation, complying with applicable governmental regulations and/or submitting information to tax or other governmental authorities.

ARTICLE 11

PATENT PROSECUTION AND PATENT COSTS

11.1 Licensee shall have the right to apply for, prosecute and maintain during the term of this Agreement, the Licensed Patents. Caltech shall provide Licensee with timely disclosures regarding Improvements and potential Improvements. The application filings, prosecution, maintenance and payment of all fees and expenses, including legal fees, relating to such Licensed Patents shall be the responsibility of Licensee, provided that Licensee shall pay for all reasonable fees and expenses, including reasonable legal fees, incurred in such application filings, prosecution and maintenance. Caltech shall provide Licensee with all information necessary or useful for the filing and prosecution of such Licensed Patents and shall cooperate fully with Licensee so that Licensee may establish and maintain such rights. Patent attorneys

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chosen by Licensee shall handle all patent filings and prosecutions, on behalf of Caltech, provided, however, Caltech shall be entitled to review and comment upon and approve all actions undertaken in the prosecution of all patents and applications. Caltech shall provide any comments or approvals hereunder promptly.

11.2 In the event Licensee declines to apply for, prosecute or maintain any Licensed Patents, Caltech shall have the right to pursue the same at Caltech's expense and Licensee shall have no rights under Caltech's interest therein. If Licensee decides not to apply for, prosecute or maintain any Licensed Patents, Licensee shall give sufficient and timely notice to Caltech so as to permit Caltech to apply for, prosecute and maintain such Licensed Patents. In such event, Licensee shall provide Caltech with all information necessary or useful for the filing and prosecution of such Licensed Patents and shall cooperate fully with Caltech so that Caltech may establish and maintain such rights.

11.3 Licensee shall reimburse Caltech for all reasonable out-of-pocket expenses incurred by Caltech for the filing for, prosecution and maintenance of the Licensed Patents Rights. Such expenses shall be reimbursed following receipt by Licensee from Caltech of (i) an invoice covering such fees (including copies of invoices for legal fees describing the legal services performed in reasonable detail) and (ii) reasonably satisfactory evidence that such fees were paid. Initially, payments shall be made in six (6) equal quarterly installments due within ten days after the end of the first six (6) full calendar quarters, effective twenty-four (24) months from the Effective Date of this Agreement. Subsequent payments under this Section 11.3 shall be made to Caltech within sixty (60) days following receipt by Licensee from Caltech of (i) an invoice covering such fees (including copies of invoices for legal fees describing the legal services performed in reasonable detail) and (ii) reasonably satisfactory evidence that such fees were paid. If Licensee elects to no longer pay the expenses of a patent or patent application within the Licensed Patents in any country, Licensee shall notify Caltech not less than thirty (30) days prior to such action. In the event that Licensee elects not to pay such expenses the license granted to Licensee hereunder shall terminate. [***] of patent expenses paid by Licensee in conjunction with foreign patent costs shall be creditable against earned royalties due Caltech in the respective territory covered by the patent or patents that are foreign filed.

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ARTICLE 12

TERMINATION

12.1 The term of this Agreement shall commence upon the Effective Date and shall terminate on a country-by-country and Licensed Product by Licensed Product basis upon the expiration of the last to expire Licensed Patent in such country. Caltech shall have the right to terminate this Agreement, subsequent to and subject to the outcome of arbitration proceedings pursuant to Article 14, prior to the date it would otherwise expire pursuant to this Section 12.1 if Licensee fails to make any payment due hereunder and Licensee continues to fail to make the payment, either to Caltech directly or by placing any disputed amount into an interest bearing escrow account to be released when the dispute is resolved, for a period of sixty (60) days after receiving written notice from Caltech specifying Licensee's failure. If this Agreement expires pursuant to the first sentence of this Section 12.1, Licensee shall retain a nonexclusive, perpetual, royalty-free, worldwide license, with the right to sublicense, under the Licensed Patents and Technology, to research, develop, make, use, sell, offer for sale and import Licensed Products.

12.2 If either party materially breaches this Agreement, the other party may elect to give the bleaching party written notice describing the alleged breach. If the breaching party has not cured such breach within sixty (60) days after receipt of such notice, the notifying party will be entitled, in addition to any other rights it may have under this Agreement, to terminate this Agreement effective immediately; provided, however, that if either party receives notification from the other of a material breach and if the party alleged to be in default notifies the other party in writing within thirty (30) days of receipt of such default notice that it disputes the asserted default, the matter will be submitted to arbitration as provided in Article 14 of this Agreement. In such event, the nonbreaching party shall not have the right to terminate this Agreement until it has been determined in such arbitration proceeding that the other party materially breached this Agreement, and the breaching party fails to cure such breach within ninety (90) days after the conclusion of such arbitration proceeding.

12.3 Licensee shall have the right to terminate this Agreement either in its entirety or as to any jurisdiction or any part of the Licensed Patents or Technology upon thirty (30) days

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written notice. If Licensee does so, it shall submit all required reports and make all required payments in accordance with Section 9.2

12.4 In the event of any termination or expiration of the term of this Agreement, Licensee shall have the right to use or sell Licensed Products on hand on the date of such termination or expiration and to complete Licensed Products in the process of manufacture at the time of such termination or expiration and use or sell the same, provided that Licensee shall submit the applicable royalty report described in Section 9.2, along with the royalty payments required above in accordance with Section 4.1 for sale of such Licensed Products, provided that the Licensed Products are still covered by a Valid Claim following such termination or expiration.

12.5 Termination of this Agreement for any reason shall not release any party hereto from any liability which, at the time of such termination, has already accrued to the other party or which is attributable to a period prior to such termination, nor preclude either party from pursuing any rights and remedies it may have hereunder or at law or in equity which accrued or are based upon any event occurring prior to such termination.

12.6 Section 5.2 and Articles 10, 12, 14, and 16 of this Agreement shall survive termination of this Agreement for any reason.

12.7 If Licensee is acquired by or merges into a third party (i.e., Licensee is not a surviving company in the merger), then Caltech may terminate its obligations to disclose and grant licenses to Improvements by providing notice to Licensee of that termination. The remainder of the Agreement and the licenses granted hereunder (including prior licenses granted to Improvements) continues.

ARTICLE 13

WARRANTIES AND NEGATION OF

WARRANTIES, IMPLIED LICENSES AND AGENCY

13.1 Caltech represents and warrants that (i) it owns all right, title and interest in and to the Licensed Patents and Technology, (ii) it has the right to enter into this Agreement, (iii) it has not granted and will not grant during the term of this Agreement rights in or to any Licensed

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Patents or Technology that are inconsistent with the rights granted to Licensee herein, (iv) to Caltech's knowledge, there are no claims of third parties that would call into question the rights of Caltech to grant to Licensee the rights contemplated hereunder; (v) to Caltech's knowledge, practice of the Licensed Patents will not infringe intellectual property rights of third parties; (vi) except for the Licensed Patents, as of the effective date of the Agreement, to Caltech's belief and knowledge, Caltech does not own or control any patents or patent applications that would dominate any practice of the Licensed Patents or Technology, and (vii) there are no threatened or pending actions, suits, investigations, claims, or proceedings in any way relating to the Licensed Patents or Technology.

13.2 Nothing in this Agreement shall be construed as:

(a) a representation or warranty of Caltech as to the validity or scope of Licensed Patents or any claim thereof; or

(b) an obligation to bring or prosecute actions or suits against third parties for infringement.

(c) conferring by implication, estoppel or otherwise, any license or rights under any existing patents of Caltech other than Licensed Patents, regardless of whether such other patents are dominant or subordinate to Licensed Patents. Notwithstanding the foregoing, and to the extent legally permissible, Caltech hereby grants Licensee a right of first refusal as to such dominant or subordinate patents, providing that a Caltech faculty member does not wish to personally commercialize the technology embodied in such patents.

13.3 CALTECH MAKES NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ASSUMES NO RESPONSIBILITIES WHATEVER WITH RESPECT TO THE USE, SALE, OR OTHER DISPOSITION BY LICENSEE OF LICENSED PRODUCT(S).

13.4 Caltech shall indemnify, defend and hold harmless Licensee from and against any and all losses, damages, costs and expenses (including attorneys' fees) arising out of a material breach by Caltech of its representations and warranties ("Claims"), provided that (i) Caltech is notified promptly of any Claims, (ii) Licensee has the sole right to control and defend or settle

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any litigation within the scope of this indemnity, and (iii) all indemnified parties cooperate to the extent necessary in the defense of any Claims.

ARTICLE 14

ARBITRATION

14.1 Any dispute under this Agreement which is not settled by mutual consent shall be finally settled by binding arbitration, conducted in accordance with the Commercial Arbitration Rules of the American Arbitration Association by one (1) independent, neutral arbitrator appointed in accordance with said rules. The arbitration shall be held in San Francisco, California. The arbitrators shall determine what discovery shall be permitted, consistent with the goal of limiting the cost and time that the parties must expend for discovery; provided the arbitrators shall permit such discovery as they deem necessary to permit an equitable resolution of the dispute. Any written evidence originally in a language other than English shall be submitted in English translation accompanied by the original or a true copy thereof. Except as otherwise expressly provided in this Agreement, the costs of the arbitration, including administrative and arbitrator(s)' fees, shall be shared equally by the parties and each party shall bear its own costs and attorneys' and witness' fees incurred in connection with the arbitration. A disputed performance or suspended performances pending the resolution of the arbitration must be completed within a reasonable time period following the final decision of the arbitrator(s). Any arbitration subject to this Article shall be completed within one (1) year from the filing of notice of a request for such arbitration. The arbitration proceedings and the decision shall not be made public without the joint consent of the parties and each party shall maintain the confidentiality of such proceedings and decision unless otherwise permitted by the other party. Any decision which requires a monetary payment shall require such payment to be payable in United States dollars, free of any tax or other deduction. The parties agree that the decision shall be the sole, exclusive and binding remedy between them regarding any and all disputes, controversies, claims and counterclaims presented to the arbitrators. Any award may be entered in a court of competent jurisdiction for a judicial recognition of the decision and an order of enforcement.

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ARTICLE 15

PRODUCT LIABILITY

15.1 Licensee agrees that Caltech shall have no liability to Licensee or to any purchasers or users of Licensed Products made or sold by Licensee for any claims, demands, losses, costs, or damages suffered by Licensee, or purchasers or users of such Licensed Products, or any other party, which may result from personal injury, death, or property damage related to the manufacture, use, or sale of such Licensed Products ("Product Claims"). Licensee agrees to defend, indemnify, and hold harmless Caltech, its trustees, officers, agents, and employees from any such Product Claims, provided that (i) Licensee is notified promptly of any Product Claims, (ii) Licensee has the sole right to control and defend or settle any litigation within the scope of this indemnity, (iii) all indemnified parties cooperate in the defense of any Product Claims, and (iv) the Product Claims do not involve or relate to a material breach by Caltech of its representations and warranties.

15.2 At such time as Licensee begins to sell or distribute Licensed Products (other than for the purpose of obtaining regulatory approvals), Licensee shall at its sole expense, procure and maintain policies of comprehensive general liability insurance in amounts not less than [***] in annual aggregate and naming those indemnified under Section 15.1 as additional insureds. Such comprehensive general liability insurance shall provide (i) product liability coverage and (ii) broad form contractual liability coverage for Licensee's indemnification under Section 15.1. In the event the aforesaid product liability coverage does not provide for occurrence liability, Licensee shall maintain such comprehensive general liability insurance for a reasonable period of not less than five (5) years after it has ceased commercial distribution or use of any Licensed Product.

15.3 Licensee shall provide Caltech with written evidence of Such insurance upon request of Caltech. Licensee shall provide Caltech with notice at least fifteen (15) days prior to any cancellation, non-renewal or material change in such insurance, to the extent Licensee receives advance notice of such matters from its insurer. If Licensee does not obtain replacement insurance providing comparable coverage within ninety (90) days following the date of such cancellation, non-renewal or material change, Caltech shall have the right to terminate this

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Agreement effective at the end of such ninety (90) day period without any additional waiting period; provided that if Licensee uses reasonable efforts but is unable to obtain the required insurance at commercially reasonable rates, Caltech shall not have the right to terminate this Agreement, and Caltech instead shall cooperate with Licensee to either grant a waiver of Licensee's obligations under this Article or assist Licensee in identifying a carrier to provide such insurance or in developing a program for self-insurance or other alternative measures.

ARTICLE 16

MISCELLANEOUS

16.1 Licensee agrees that it shall not use the name of Caltech, or California Institute of Technology, in any advertising or publicity material, or make any form of representation or statement which would constitute an express or implied endorsement by Caltech of any Licensed Product, and that it shall not authorize others to do so, without first having obtained written approval from Caltech, except as may be required by governmental law, rule or regulation.

16.2 Licensee agrees to mark the appropriate U.S. patent number or numbers on all Licensed Products made or sold in the United States in accordance with all applicable governmental laws, rules and regulations, and to require its Sublicensees to do the same.

16.3 This Agreement sets forth the complete agreement of the parties concerning the subject matter hereof. No claimed oral agreement in respect thereto shall be considered as any part hereof. No waiver of or change in any of the terms hereof subsequent to the execution hereof claimed to have been made by any representative of either party shall have any force or effect unless in writing, signed by duly authorized representatives of the parties.

16.4 This Agreement shall be binding upon and inure to the benefit of any successor or assignee of Caltech. This Agreement is not assignable by Licensee without the prior written consent of Caltech, except that Licensee may assign this Agreement without the prior written consent of Caltech, to any Affiliate, or in connection with the sale or transfer of all or substantially all the assets of Licensee relating to the Licensed Products or services utilizing the methods within the Licensed Patents. Any permitted assignee shall succeed to all of the rights and obligations of Licensee under this Agreement.

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16.5 This Agreement is subject in all respects to the laws and regulations of the United States of America, including the Export Administration Act of 1979, as amended, and any regulations thereunder.

16.6 This Agreement shall be deemed to have been entered into in California and shall be construed and enforced in accordance with California law.

16.7 Any notice or communication required or permitted to be given or made under this Agreement shall be addressed as follows:

Caltech: Office of Technology Transfer
California Institute of Technology
1200 East California Boulevard (MC 210-85)
Pasadena, CA 91125
Fax No.: (626) 356-2486

Licensee: Fluidigm Corporation
7100 Shoreline Court
South San Francisco, CA 94080
Attn: President
Fax No: (650) 871-7195
Phone: (650) 266-6000

Either party may notify the other in writing of a change of address or fax number, in which event any subsequent communication relative to this Agreement shall be sent to the last said notified address or number, provided, however, that the parties shall deliver all material notices under this Agreement by registered mail or overnight delivery service. All notices and communications relating to this Agreement shall be deemed to have been given when received.

16.8 Nothing in this Agreement will impair Licensee's right to independently acquire, license, develop for itself, or have others develop for it, intellectual property and technology performing similar functions as the Licensed Patents and Technology or to market and distribute products other than Licensed Products based on such other intellectual property and technology.

16.9 NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES ARISING OUT OF THIS AGREEMENT, HOWEVER CAUSED, UNDER ANY THEORY OF LIABILITY.

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16.10 The relationship of Licensee and Caltech established by this Agreement is that of independent contractors, Nothing in this Agreement shall be construed to create any other relationship between Licensee and Caltech. Neither party shall have any right, power or authority to assume, create or incur any expense, liability or obligation, express or implied, on behalf of the other.

16.11 Licensee agrees that a Licensed Product which embodies a patented invention or is produced through the use thereof for sale in the United States shall be manufactured substantially in the United States to the extent required by 35 U.S.C. Section 204.

16.12 Neither party shall lose any rights hereunder or be liable to the other party for damages or losses (except for payment obligations) on account of failure of performance by the defaulting party if the failure is occasioned by war, strike, fire, Act of God, earthquake, flood, lockout, embargo, governmental acts or orders or restrictions, failure of suppliers, or any other reason where failure to perform is beyond reasonable control and not caused by the negligence or intentional conduct or misconduct of the nonperforming party, and such party has exerted all reasonable efforts to avoid or remedy such force majeure; provided, however, that in no event shall a party be required to settle any labor dispute or disturbance.

16.13 In the event that any provisions of this Agreement are determined to be invalid or unenforceable by a court of competent jurisdiction, the remainder of the Agreement shall remain in full force and effect without said provision. The parties shall in good faith negotiate a substitute clause for any provision declared invalid or unenforceable, which shall most nearly approximate the intent of the parties in entering this Agreement.

16.14 This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

16.15 The headings of the several Sections are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.

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16.16 Whenever provision is made in this Agreement for either party to secure the consent or approval of the other, that consent or approval shall not unreasonably be withheld or delayed, and whenever in this Agreement provisions are made for one party to object to or disapprove a matter, such objection or disapproval shall not unreasonably be exercised.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed:

Date: 4/29/04

CALIFORNIA INSTITUTE OF TECHNOLOGY
(Caltech)

By: /s/ Lawrence Gilbert
Name: Lawrence Gilbert
Title: Senior Director
Office of Technology Transfer

Date: April 28, 2004

FLUIDIGM CORPORATION
(Licensee)

By: /s/ Gajus Worthington
Name: Gajus Worthington
Title: President and CEO

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Exhibit A

Licensed Patents

Date: April 22, 2004 **Confidential**

[***]

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Exhibit 10.5A

2020.LICI.001.C
California Institute of Technology

ADDENDUM TO
SECOND AMENDED AND RESTATED LICENSE AGREEMENT

THIS ADDENDUM TO SECOND AMENDED AND RESTATED LICENSE AGREEMENT (this "Addendum") dated as of March 29, 2007 (the "Addendum Date"), is entered into between CALIFORNIA INSTITUTE OF TECHNOLOGY ("Caltech"), having an address at 1200 East California Boulevard, Pasadena, California 91125, and FLUIDIGM CORPORATION ("Licensee"), having a principal place of business at 7100 Shoreline Court, South San Francisco, California 94080, with respect to the following facts:

A. The parties entered into the Second Amended and Restated License Agreement (the "Agreement") effective May 1, 2000, with a second restatement date as of May 1, 2004. All terms used, but not defined herein, shall have the respective meanings set forth in the Agreement.

B. On the terms and conditions of this Addendum, the parties desire to clarify and modify certain provisions to the Agreement.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants set forth below, the parties agree as follows:

1. Licensed Patents and Improvements.

1.1 The Agreement is amended by deleting Exhibit A to the Agreement and by replacing it with Exhibit A to this Addendum.

1.2 Caltech represents that it has disclosed to Licensee all Improvements arising prior to the Addendum Date.

1.3 The parties acknowledge that Exhibit A to this Addendum includes (a) all Improvements disclosed by Caltech to Licensee prior to the Addendum Date, and elected by Licensee to be included in the scope of the license grant by Caltech to Licensee under the Agreement, and (b) all updates on all Licensed Patents as of the Addendum Date. Caltech confirms that Licensee has taken all action on its part that is necessary for all subject matter included in Exhibit A to this Addendum to be included in the scope of the license grant by Caltech to Licensee under the Agreement.

2. Licensee Equity Interest and Improvement Periods.

2.1 Notwithstanding anything to the contrary in Article 5 of the Agreement, the Improvement Periods shall be those periods from June 1, 2003 through May 31, 2004, from June 1, 2004 through May 31, 2005, from [***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

2.2 Notwithstanding anything to the contrary in Article 5 of the Agreement, (a) Licensee shall issue to Caltech [***] [***] shares of common stock of Licensee, pursuant to the terms of a reasonable and customary stock issuance agreement, and (b) the parties acknowledge that the issuance of such shares (in addition to the shares issued by Licensee to Caltech prior to the Second Restatement Date) shall be in full satisfaction of Licensee's obligations to issue shares or otherwise make payments to Caltech pursuant to the Agreement.

3. Royalty Reports.

The parties acknowledge (a) that the royalty reports received by Caltech under Section 9.2 of the Agreement prior to the Addendum Date are presumed correct and not subject to challenge, audit or amendment, and (b) that the format of, and the methodology used by Licensee in preparing, the royalty reports under Section 9.2 of the Agreement are mutually acceptable and in compliance with the terms and conditions of the Agreement.

4. Patent Costs.

Notwithstanding anything to the contrary in Article 11 of the Agreement, Licensee shall have no obligation to reimburse Caltech for any costs or expenses incurred by Caltech in connection with the Licensed Patents that have not been reimbursed by Licensee prior to the Addendum Date.

5. Further Assurances.

Each party shall take such further actions, and execute such further documents and instruments, as reasonably requested by the other party to effectuate the grant of licenses and rights from Caltech to Licensee under the Agreement and otherwise to enable Licensee to enjoy the full benefit thereof.

6. Miscellaneous.

6.1 This Addendum shall be effective for all purposes as of the Addendum Date. Except as otherwise expressly modified by this Addendum, the Agreement shall remain in full force and effect in accordance with its terms.

6.2 This Addendum shall be governed by, interpreted and construed in accordance with the laws of the State of California, without regard to conflicts of law principles.

6.3 This Addendum may be executed in counterparts, each of which shall be deemed to be an original and together shall be deemed to be one and the same document.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have caused this Addendum to be duly executed and delivered effective as of the Addendum Date.

California Institute of Technology

By: /s/ Lawrence Gilbert
(Signature)

Lawrence Gilbert
(Printed Name)

SR DR Tech Transfer
(Title)

Fluidigm Corporation

By: /s/ Gajus V. Worthington
(Signature)

Gajus V. Worthington
(Printed Name)

CEO
(Title)

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EXHIBIT A

[TO BE ATTACHED]

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Appendix 1.7 Fluidigm Patent Family
US Cases

[***]

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Appendix 1.7 Fluidigm Patent Family
International Cases

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[***]

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Exhibit 10.6

4060.LICI.006 Harvard

CO-EXCLUSIVE LICENSE AGREEMENT

Between

President and Fellows of Harvard College

And

Mycometrix Corporation

Effective as of October 15, 2000

Re: Harvard Case [***]

In consideration of the mutual promises and covenants set forth below, the parties hereto agree as follows:

ARTICLE I
DEFINITIONS

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

As used in this Agreement, the following terms shall have the following meanings:

1.1 ACADEMIC RESEARCH PURPOSES: use of PATENT RIGHTS for academic research or other not-for-profit scholarly purposes which are undertaken at a non-profit or governmental institution that does not use the PATENT RIGHTS in the production or manufacture of products for sale or the performance of services for a fee.

1.2 AFFILIATE: any entity which controls, is controlled by, or is under common control with a party by ownership or control of at least fifty percent (50%) of the voting stock or other ownership. Unless otherwise specified, the term LICENSEE includes AFFILIATES.

1.3 FIELD: use of PATENT RIGHTS to develop, manufacture, use, offer for sale, sell, or import components and products in FIELD I and/or FIELD II:

FIELD I: [***]

FIELD II: [***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1.4 HARVARD: President and Fellows of Harvard College, a nonprofit Massachusetts educational corporation having offices at the Office for Technology and Trademark Licensing, Holyoke Center, Suite 727, 1350 Massachusetts Avenue, Cambridge, Massachusetts 02138.

1.5 LICENSED PROCESSES: the processes covered by at least one VALID CLAIM included within the PATENT RIGHTS.

1.6 LICENSED PRODUCTS: products covered by at least one VALID CLAIM included within the PATENT RIGHTS or products made or services provided in accordance with or by means of LICENSED PROCESSES.

1.7 LICENSEE: Mycometrix Corporation, a corporation organized under the laws of Califonia having its principal offices at 213 East Grand Avenue, South San Francisco, CA 94080.

1.8 NET SERVICE INCOME: SERVICE INCOME less LICENSEE's actual direct and indirect cost for research, development and/or services provided.

1.9 NET SALES: the amount actually received for sales, leases, or other transfers of LICENSED PRODUCTS, less:

(i) customary trade, quantity or cash discounts and non-affiliated brokers' or agents' commissions actually allowed and taken;

(ii) amounts repaid or credited by reason of rejection or return;

(iii) to the extent separately stated on purchase orders, invoices, or other documents of sale, taxes levied on and/or other governmental charges made as to production, sale, transportation, delivery or use and paid by or on behalf of LICENSEE; and

(iv) reasonable charges for delivery or transportation provided by third parties and cost of insurance in transit, if separately stated.

NET SALES also includes the fair market value of any non-cash consideration received by LICENSEE for the sale, lease, or transfer of LICENSED PRODUCTS.

If a LICENSED PRODUCT is sold as a combination product containing the LICENSED PRODUCT and one or more other components, NET SALES shall be calculated by multiplying the gross amount invoiced for the sale of the combination product by the fraction A/A+B where A is the average gross selling price of the LICENSED PRODUCT sold separately by LICENSEE and B is the average gross selling price of such other components of the combination products sold separately by LICENSEE during the relevant royalty payment period.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

In the event that LICENSEE grants a sublicensee hereunder, and receives payments based upon SUBLICENSEE's sales of LICENSED PRODUCTS, LICENSEE may upon approval from HARVARD (which shall not be unreasonably withheld) modify the definition of NET SALES for the purposes of calculating royalties payable to HARVARD on such SUBLICENSEE's sales to be the same as the definition of NET SALES on which such royalties to LICENSEE are calculated.

1.10 SERVICE INCOME: the total financial consideration received by LICENSEE for commercial services performed on a fee-for-service basis using the LICENSED PRODUCTS or LICENSED PROCESSES by LICENSEE under a contract with a third party, where such services are based primarily on the use of fully functional LICENSED PRODUCTS or LICENSED PROCESSES (as applicable) for their intended commercial use (such as, for example, where LICENSEE performs commercial-scale genotyping services for a pharmaceutical company on a fee-for-service basis using fully developed microfluidics chips comprising LICENSED PRODUCTS). SERVICE INCOME shall not include amounts received in connection with research and/or development of LICENSED PRODUCTS or LICENSED PROCESSES themselves.

1.11 PATENT RIGHTS: The applications and patents as listed in Appendix A of this Agreement, the allowed claims of such applications, the inventions described and claimed therein, and any divisions or continuations of the applications and patents as listed in Appendix A, and specific claims of any continuations-in-part of such applications to the extent the specific claims are directed to subject matter described in the applications and patents listed in Appendix A in a manner sufficient to support such specific claims under 35 U.S.C., patents issuing thereon or reissues thereof, and any and all foreign patents and patent applications corresponding thereto, all to the extent owned or controlled by HARVARD.

1.12 SUBLICENSE INCOME: the amount paid to LICENSEE by a third party (other than an AFFILIATE of LICENSEE) (a) for the sublicening of PATENT RIGHTS to a third party as well as (b) for the related licensing of LICENSEE's own patent rights or know-how or LICENSEE's in-licensed non-HARVARD technologies, including but not limited to (i) license fees, (ii) milestone payments, (iii) royalties, (iv) the fair market value in cash of any non-cash consideration for such sublicense, and (v) in the event that LICENSEE receives any payment for equity in consideration for the grant of sublicense rights that included a premium over the fair market value of such equity, the amount of such premium. LICENSEE shall be responsible for determining such fair market value with reasonable business judgment.

1.13 SUBLICENSEE: any non-AFFILIATE granted a sublicense of any of the rights HARVARD has granted to LICENSEE under Section 3.1.

1.14 TERRITORY: Worldwide.

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1.15 VALID CLAIM: either (i) a claim of an issued patent that has not been held unenforceable or invalid by an agency or a court of competent jurisdiction in any unappealable or unappealed decision or (ii) a claim of a published, pending patent application, which claim is substantially identical to a corresponding claim in a subsequently issued patent having priority to the patent application.

1.16 The terms “Public Law 96-517” and “Public Law 98-620” include all amendments to those statutes.

1.17 The terms “sold” and “sell” include, without limitation, leases and other transfers and similar transactions.

ARTICLE II
REPRESENTATIONS

2.1 HARVARD is owner by assignment from [***], in the US and foreign patent applications corresponding thereto, and in the inventions described and claimed therein. Inventorship will be finalized in the near future.

2.2 HARVARD has authority to issue licenses under PATENT RIGHTS.

2.3 HARVARD is committed to the policy that ideas or creative works produced at HARVARD should be used for the greatest possible public benefit, and believes that every reasonable incentive should be provided for the prompt introduction of such ideas into public use, all in a manner consistent with the public interest.

2.4 LICENSEE is prepared and intends to diligently develop the invention and to bring products to market which are subject to this Agreement, specifically including one or more products in the FIELD selected from a [***].

2.5 LICENSEE is desirous of obtaining a co-exclusive license in the FIELD and in the TERRITORY in order to practice the PATENT RIGHTS in the United States and in certain foreign countries, and to manufacture, use and sell in the commercial market the products made in accordance therewith, and HARVARD is desirous of granting such a license to LICENSEE in accordance with the terms of this Agreement.

ARTICLE III
GRANT OF RIGHTS

3.1 HARVARD hereby grants to LICENSEE and LICENSEE accepts, subject to the terms and conditions hereof, in the TERRITORY a co-exclusive commercial license under PATENT

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RIGHTS in FIELD I and in FIELD II to make and have made, to use and have used, to sell and have sold, and to offer for sale and have offered for sale the LICENSED PRODUCTS, and to practice the LICENSED PROCESSES, for the life of the PATENT RIGHTS. HARVARD will grant no more than two commercial licenses in FIELD I at any time and will grant no more than two commercial licenses in FIELD II at any time and HARVARD will not grant other licenses in the FIELD except as required by HARVARD's obligations in Section 3.2(a) or as permitted Section 3.2(b). Such co-exclusive license shall include the right to grant sublicenses under the following circumstances: (i) LICENSEE can demonstrate that it has added significant value to the PATENT RIGHTS to be sublicensed, and that such a sublicense also contains a substantial and essentially simultaneous license of LICENSEE owned intellectual property, or (ii) LICENSEE grants a sublicense under other HARVARD patent rights licensed exclusively to LICENSEE which are dominated by PATENT RIGHTS, and such sublicense under PATENT RIGHTS is necessary to practice such other HARVARD patent rights.

3.2 The granting and exercise of this license is subject to the following conditions:

(a) HARVARD's "Statement of Policy in Regard to Inventions, Patents and Copyrights," dated August 10, 1998, Public Law 96-517, Public Law 98-620. In addition, this Agreement is subject to HARVARD's obligations under agreements with other sponsors of research, provided that such obligations are not in conflict with the rights granted hereunder. Any right granted in this Agreement greater than that permitted under Public Law 96-517, or Public Law 98-620, shall be subject to modification as may be required to conform to the provisions of those statutes.

(b) HARVARD reserves the right to make and use, and grant to others non-exclusive licenses to make and use solely for ACADEMIC RESEARCH PURPOSES the subject matter described and claimed in PATENT RIGHTS.

(c) LICENSEE shall use commercially reasonable efforts to effect introduction of the LICENSED PRODUCTS into the commercial market as soon as practicable, consistent with sound and reasonable business practice and judgment; thereafter, until the expiration of this Agreement, LICENSEE shall endeavor to keep LICENSED PRODUCTS reasonably available to the public.

(d) At any time after three years from the effective date of this Agreement and as HARVARD's sole remedy for such non-performance, HARVARD may increase the license maintenance royalty under Section 4.4 to [***] ($[***]) dollars each in FIELD I and in FIELD II in year 2004 and [***] ($[***]) dollars each in FIELD I and FIELD II per year each year beginning in 2005, if in HARVARD's reasonable judgment, the Progress Reports furnished by LICENSEE do not demonstrate that LICENSEE has satisfied at least one of the following conditions, which non-performance is not cured within ninety (90) days following the written notification of such by HARVARD to LICENSEE:

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(i) has put the licensed subject matter into commercial use in at least one of the countries hereby licensed, directly or through a sublicense, and is keeping the licensed subject matter reasonably available to the public; or

(ii) is engaged in research, development, manufacturing, marketing or sublicensing activity appropriate to achieving 3.2(d)(i).

(e) In all sublicenses granted by LICENSEE hereunder, LICENSEE shall include a requirement that the SUBLICENSEE use commercially reasonable efforts to bring the subject matter of the sublicense into commercial use. LICENSEE shall further provide in such sublicenses that such sublicenses are subject and subordinate to the terms and conditions of this Agreement, except: (i) the SUBLICENSEE may not further sublicense; and (ii) the rate of royalty on NET SALES paid by the SUBLICENSEE to the LICENSEE. Copies of the relevant provisions of all sublicense agreements shall be provided promptly to HARVARD. HARVARD agrees to maintain any information contained in such provisions in confidence, except as otherwise required by law, however, HARVARD may include in its usual reports annual amounts of royalties paid.

(f) A license in any other field of use in addition to the FIELD shall be the subject of a separate agreement and shall require LICENSEE's submission of evidence, satisfactory to HARVARD, demonstrating LICENSEE's willingness and ability to develop and commercialize in such other field of use the kinds of products or processes likely to be encompassed in such other fields.

(g) To the extent that federal funds are used to support research leading to a patent or patent application in the PATENT RIGHTS, LICENSEE shall cause any LICENSED PRODUCT produced for sale by LICENSEE or SUBLICENSEES in the United States to be manufactured substantially in the United States during the period of exclusivity of this license in the United States.

3.4 All rights reserved to the United States Government and others under Public Law 96-517, and Public Law 98-620, shall remain and shall in no way be affected by this Agreement.

ARTICLE IV
ROYALTIES

4.1 LICENSEE shall pay to HARVARD a non-refundable license royalty fee in the sum of [***] dollars ($[***]) payable within thirty (30) days of the execution date of this Agreement.

4.2 (a) In consideration of the right and license granted herein, LICENSEE shall pay to HARVARD during the term of this Agreement a royalty of [***] percent ([***]) on NET SALES of LICENSED PRODUCTS sold by LICENSEE.

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(b) In the event that a single LICENSED PRODUCT or LICENSED PROCESS is covered by HARVARD intellectual property in addition to PATENT RIGHTS, which is licensed to LICENSEE under other agreements as of the date of this Agreement, then the total royalty payment due HARVARD under all such agreements including this Agreement shall be [***] percent ([***]) of NET SALES. LICENSEE shall notify HARVARD of the identity of each license agreement that includes patent rights covering the product or process, and HARVARD shall distribute the royalties evenly among such agreements.

(c) As consideration for the rights granted hereunder, LICENSEE shall pay to HARVARD during the term of this Agreement a royalty in the form of stock of LICENSEE as follows:

(i) LICENSEE shall issue to HARVARD [***] shares of the Common Stock of LICENSEE ("Shares") pursuant to the terms of a mutually acceptable Stock Subscription Agreement, provided, however, that HARVARD shall be subject to and enter into appropriate agreements and related documents as required of other stockholders of LICENSEE.

(ii) HARVARD represents and warrants to LICENSEE that:

(1) HARVARD is acquiring the Shares for its own account for investment and not with a view to, or for sale in connection with any distribution thereof, nor with any present intention of distributing or selling the same; and HARVARD has no present or contemplated agreement, undertaking, arrangement, obligation, indebtedness or commitment providing for the disposition thereof.

(2) HARVARD has full power and authority to enter into and to perform this Agreement in accordance with its terms.

(3) HARVARD has sufficient knowledge and experience in investing in companies similar to LICENSEE so as to be able to evaluate the risks and merits of its investment in LICENSEE and is able financially to bear the risks thereof.

(iii) Each certificate representing the Shares shall bear a legend substantially in the following form:

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"The shares represented by this certificate have not been registered under the Securities Act of 1933 or any state securities law and they may not be sold or otherwise transferred by any person, including a pledgee, unless (1) either (a) a registration statement with respect to such shares shall be effective under the Securities Act of 1933, as amended, or (b) the Corporation shall have received an opinion of counsel satisfactory to the Corporation that an exemption from registration under such Act is then available, and (2) there shall have been compliance with all applicable securities laws."

"The shares represented by this certificate are subject to a mutually agree-upon Stock Purchase and Right of First Refusal Agreement with this Corporation, a copy of which Stock Purchase and Right of First Refusal Agreement is available for inspection at the offices of the Corporation or may be made available upon request."

The foregoing legend shall be removed from the certificates representing any Shares, at the request of the holder thereof, at such time as they become eligible for resale pursuant to the Securities Act of 1933, as amended.

If at any time prior to the time the Shares are eligible for resale pursuant to an exemption from registration under the Securities Act of 1933, as amended, LICENSEE proposes to register any of its Common Stock, under the Securities Act of 1933, except at LICENSEE's initial public offering or any offering pursuant to Forms S-4 or S-8, LICENSEE shall offer HARVARD the opportunity to have its Shares registered under the registration statement to be filed at such time. HARVARD will be offered the right to register its Shares under the same terms, conditions and restrictions as other shareholders with piggyback registration rights and the inclusion of any Shares in such registration statement shall be subject to the approval of the underwriters of such offering

(iv) HARVARD's ownership rights to Shares shall not be affected should the license pursuant to this Agreement be converted to a non-exclusive one.

(d) In the case of sublicenses, LICENSEE shall also pay to HARVARD a royalty of [***] of SUBLICENSE INCOME. If compensation for such a sublicense of PATENT RIGHTS is bundled with compensation received for the sublicensing of the other HARVARD patent rights licensed to LICENSEE under other agreements as of the date of this Agreement, LICENSEE shall pay HARVARD only [***] of the total compensation received no matter how many license agreements from HARVARD are involved. In such a case, LICENSEE shall notify HARVARD of the identity of each license agreement involved and HARVARD shall distribute its [***] of

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compensation equally among those license agreements, including this Agreement.

(e) LICENSEE shall pay HARVARD [***] of NET SERVICE INCOME. If SERVICE INCOME is bundled with service income under another license to LICENSEE as of the date of this Agreement, LICENSEE shall pay a royalty of [***] of NET SERVICE INCOME received from each and every third party ("Third Party") to which services are provided. LICENSEE shall notify HARVARD of the identity of each license agreement involved in the services and HARVARD shall distribute its [***] of compensation equally among those license agreements, including this Agreement.

(f) If other co-exclusive licenses in the same FIELD and TERRITORY are granted after the date this Agreement is executed, the above financial compensation shall not exceed the financial compensation to be paid by other licensees in the same FIELD and TERRITORY during the term of the co-exclusive license provided LICENSEE accepts any less favorable terms included in such other license.

If stock is part of the financial compensation to be paid by other licensees in the same FIELD and TERITORY, the fair market value of the stock shall be the same as the price per share which other investors paid in the last round of financing unless the stock is publicly traded.

4.3 On sales between LICENSEE and its AFFILIATES for resale or incorporation into products, the royalty shall be paid on the NET SALES of the AFFILIATE. On sales between LICENSEE and sublicensees for resale, the royalty shall be paid on the SUBLICENSE INCOME.

4.4 No later than January 1 of each calendar year indicated below, LICENSEE shall pay to HARVARD the following non-refundable license maintenance royalty and/or advance on royalties. Such payments shall be credited against running royalties due for that calendar year and Royalty Reports shall reflect such a credit. Such payments shall not be credited against milestone payments (if any) nor against royalties due for any subsequent calendar year nor against such payments due under any other agreements with HARVARD.

	FIELD I	FIELD II
January 1, 2002	[***]	[***]
January 1, 2003	[***]	[***]
January 1, 2004	[***]	[***]
each year thereafter	[***]	[***]

ARTICLE V
REPORTING

5.1 Prior to signing this Agreement, LICENSEE has provided to HARVARD a written business plan under which LICENSEE intends to bring the subject matter of the licenses

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granted hereunder into commercial use upon execution of this Agreement. Such plan includes proposed marketing efforts.

5.2 No later than sixty (60) days after June 30 of each calendar year, LICENSEE shall provide to HARVARD a written annual Progress Report describing progress on research and development, regulatory approvals, manufacturing, sublicensing, marketing and sales during the most recent twelve (12) month period ending June 30 and plans for the forthcoming year. If multiple technologies are covered by the license granted hereunder, the Progress Report shall provide the information set forth above for each technology. If progress differs from that anticipated in the plan required under Section 5.1, LICENSEE shall explain the reasons for the difference and propose a modified plan for HARVARD's review. LICENSEE shall also provide any reasonable additional data HARVARD requires to evaluate LICENSEE's performance.

5.3 LICENSEE shall report to HARVARD the date of first sale of LICENSED PRODUCTS (or results of LICENSED PROCESSES) in each country within thirty (30) days of occurrence.

5.4 (a) LICENSEE shall submit to HARVARD within sixty (60) days after each calendar half year ending June 30 and December 31, a Royalty Report setting forth for such half year at least the following information:

(i) the number of LICENSED PRODUCTS sold by LICENSEE in each country;

(ii) total billings and amounts actually received for such LICENSED PRODUCTS;

(iii) an accounting for all LICENSED PROCESSES used or sold;

(iv) deductions applicable to determine the NET SALES thereof;

(v) the amount of SERVICE INCOME received by LICENSEE and an accounting of all deductions to yield NET SERVICE INCOME;

(vi) the amount of SUBLICENSE INCOME received by LICENSEE; and

(vii) the amount of royalty due thereon, or, if no royalties are due to HARVARD for any reporting period, the statement that no royalties are due.

Such report shall be certified as correct by an officer of LICENSEE and shall include a detailed listing of all deductions from royalties.

(b) LICENSEE shall pay to HARVARD with each such Royalty Report the amount of royalty due with respect to such half year. If multiple technologies are covered by the license granted hereunder, LICENSEE shall specify which PATENT RIGHTS are utilized for each LICENSED PRODUCT and LICENSED PROCESS included in the Royalty Report.

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(c) All payments due hereunder shall be deemed received when funds are credited to HARVARD's bank account and shall be payable by check or wire transfer in United States dollars. Conversion of foreign currency to U.S. dollars shall be made at the conversion rate existing in the United States (as reported in the New York Times or the Wall Street Journal) on the last working day of each royalty period. No transfer, exchange, collection or other charges shall be deducted from such payments.

(d) All such reports shall be maintained in confidence by HARVARD except as required by law; however, HARVARD may include in its usual reports annual amounts of royalties paid.

(e) Late payments shall be subject to a charge of one and one-half percent (1.5%) per month, or $250, whichever is greater.

5.5 In the event of acquisition, merger, change of corporate name or change in make-up, organization, or identity, LICENSEE shall notify HARVARD in writing within thirty (30) days of such event.

5.6 If by law, regulation or fiscal policy of a particular country, conversion into United States dollars or transfer of funds of a convertible currency to the United States is restricted or forbidden, LICENSEE shall give HARVARD prompt notice in writing and shall pay the royalty and other amounts due through such means or methods as are lawful in such country as HARVARD may reasonably designate. Failing the designation by HARVARD of such lawful means or methods within thirty (30) days after such notice is given to HARVARD, LICENSEE shall deposit such royalty or other payment in local currency to the credit of HARVARD in a recognized banking institution designated by HARVARD, or if none is designated by HARVARD within the thirty (30) day period described above, in a recognized banking institution selected by LICENSEE and identified in a written notice to HARVARD by LICENSEE, and such deposit shall fulfill all obligations of LICENSEE to HARVARD with respect to such royalties. When in any country in which the law or regulations prohibit both the transmittal and deposit of royalties on sales in such country, royalty payments shall be suspended for as long as such prohibition is in effect, and as soon as such prohibition ceases to be in effect, all royalties which LICENSEE would have been under obligation to transmit or deposit, but for the prohibition, shall be deposited or transmitted promptly to the extent allowable.

ARTICLE VI
RECORD KEEPING

6.1 LICENSEE shall keep, and shall require its SUBLICENSEES to keep, accurate records (together with supporting documentation) of LICENSED PRODUCTS made, used or sold under this Agreement, and SERVICE INCOME and SUBLICENSE INCOME received by LICENSEE under this Agreement, appropriate to determine the amount of royalties due to HARVARD hereunder. Such records shall be retained for three (3) years following the end of the reporting period to which they relate. For such three year period, they shall be

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available during normal business hours upon reasonable advance notice for examination by a certified public accountant selected by HARVARD, and reasonably acceptable to LICENSEE, for the sole purpose of verifying reports and payments hereunder. In conducting examinations pursuant to this Section 6.1, HARVARD's accountant shall have access to all records which HARVARD reasonably believes to be relevant to the calculation of royalties under Article IV. HARVARD agrees to maintain any information contained in such records in confidence, except as otherwise required by law and except information in regarding the amount of royalties due.

6.2 HARVARD's accountant shall not disclose to HARVARD any information other than information relating to the accuracy of reports and payments made hereunder.

6.3 Such examination by HARVARD's accountant shall be at HARVARD's expense, except that if such examination shows an underreporting or underpayment in excess of five percent (5%) for any twelve (12) month period, then LICENSEE shall pay the cost of such examination as well as any additional sum that would have been payable to HARVARD had the LICENSEE reported correctly, plus interest on said sum at the rate of one and one-half percent (1.5%) per month.

ARTICLE VII
DOMESTIC AND FOREIGN PATENT FILING AND MAINTENANCE

7.1 Upon execution of this Agreement, LICENSEE shall reimburse HARVARD for fifty percent (50%) of all reasonable expenses HARVARD has incurred for the preparation, filing, prosecution, maintenance and counseling with respect to PATENT RIGHTS. Such expenses total [* * *] as of October 1, 2000. Thereafter, LICENSEE shall reimburse HARVARD for [* * *] of all such future reasonable expenses prior to termination of this Agreement upon receipt of invoices from HARVARD.

7.2 HARVARD shall be responsible for the preparation, filing, prosecution and maintenance of any and all patent applications and patents included in PATENT RIGHTS. HARVARD will instruct counsel to directly notify HARVARD and LICENSEE and provide them copies of any official communications from the United States and foreign patent offices relating to said prosecution, and to provide LICENSEE with advance draft copies of all relevant communications to the various patent offices, so that LICENSEE may be informed and apprised of the continuing prosecution of patent applications in PATENT RIGHTS. LICENSEE shall have reasonable opportunities to participate in decision making on all key decisions affecting filing, prosecution and maintenance of patents and patent applications in PATENT RIGHTS. HARVARD will use reasonable efforts to incorporate LICENSEE's reasonable suggestions regarding said prosecution. HARVARD shall use all reasonable efforts to amend any patent application to include claims reasonably requested by LICENSEE to protect LICENSED PRODUCTS.

7.3 HARVARD and LICENSEE shall cooperate fully in the preparation, filing, prosecution and maintenance of PATENT RIGHTS and of all patents and patent applications licensed to LICENSEE hereunder, executing all papers and instruments or requiring members of

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HARVARD to execute such papers and instruments so as to enable HARVARD to apply for, to prosecute and to maintain patent applications and patents in HARVARD's name in any country. Each party shall provide to the other prompt notice as to all matters which come to its attention and which may affect the preparation, filing, prosecution or maintenance of any such patent applications or patents.

7.4 LICENSEE may elect to surrender its PATENT RIGHTS in any country upon sixty (60) days written notice to HARVARD. Such notice shall not relieve LICENSEE from responsibility to reimburse HARVARD for patent-related expenses incurred prior to the expiration of the (60) day notice period.

7.5 If HARVARD elects not to prosecute or maintain any of the patents or patent applications relating to PATENT RIGHTS or any portion thereof in any country, LICENSEE shall be given sufficient notice of HARVARD's decision so that LICENSEE may request that HARVARD continue prosecuting or maintaining such patents or patent applications, at LICENSEE's expense. If HARVARD elects not to prosecute or maintain such patents or patent applications after such request by LICENSEE, then LICENSEE shall have the right, but not the obligation, at its own expense to prosecute and maintain such patents and patent applications or portion thereof in such country and in HARVARD's name. If LICENSEE assumes 100% of the costs to file, prosecute, and maintain certain patents and patent applications relating to the PATENT RIGHTS pursuant to this Section 7.5, and, if HARVARD licenses the PATENT RIGHTS to one or more co-exclusive licensees designated in Section 3.1 after such time, then HARVARD will credit LICENSEE with the costs LICENSEE has paid in excess of [* * *] if one other licensee, due for the preparation, filing, prosecution and maintenance of patents and patent applications relating to PATENT RIGHTS pursuant to Section 7.1 above.

7.6 If LICENSEE can demonstrate that it is not being adequately informed or apprised of the continuing prosecution of patents or patent applications in PATENT RIGHTS, or that it is not being provided with reasonable opportunities to participate in decision making or that its interests are not being adequately protected, LICENSEE shall be entitled to engage, at LICENSEE's expense, independent patent counsel to review and evaluate patent prosecution and filing of patents and patent applications included in PATENT RIGHTS.

ARTICLE VIII
INFRINGEMENT

8.1 With respect to any PATENT RIGHTS that are licensed to LICENSEE pursuant to this Agreement, LICENSEE shall have the right to prosecute in its own name and at its own expense any infringement of such patent. HARVARD agrees to notify LICENSEE promptly of each infringement of such patents of which HARVARD, as applicable, is or becomes aware. Before LICENSEE commences an action with respect to any infringement of such patents, LICENSEE shall give careful consideration to the views of HARVARD and to potential effects on the public interest in making its decision whether or not to sue.

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8.2 LICENSEE acknowledges that other co-exclusive licensees of PATENT RIGHTS designated in Section 3.1 shall have rights identical to LICENSEE to prosecute infringers and that co- exclusive licensees will be bound by the identical terms of this Section 8.2. In any prosecution instigated by LICENSEE and in which HARVARD, as necessary, is also named plaintiff as owner of the PATENT RIGHTS, LICENSEE must notify other co-exclusive licensees of the existence of such legal action and allow other co-exclusive licensees to join as a plaintiff upon co-exclusive licensees' request. In addition, in the event other co- exclusive licensees instigate an infringement prosecution, LICENSEE hereby consents to being joined as a plaintiff in such suit solely for the purpose of procuring standing to bring the action and at the sole expense of the instigating co-exclusive licensee. To the extent that LICENSEE desires to participate in any strategic decisions affecting the prosecution of the action brought by other co-exclusive licensees, LICENSEE acknowledges that it and co- exclusive licensees will necessarily have to reach a mutual agreement concerning litigation expenses and strategy. In no event shall HARVARD incur any liability or expense in connection with any action of co-exclusive licensees, joint or otherwise.

During any such litigation, HARVARD will agree to not license any defendant or accused infringer of the PATENT RIGHTS in the litigation, without LICENSEE's prior written consent.

8.3 (a) If LICENSEE elects to commence an action as described above, HARVARD may, to the extent permitted by law, elect to join as parties in that action. Regardless of whether HARVARD elects to join as parties, HARVARD shall cooperate fully with LICENSEE in connection with any such action.

(b) HARVARD agrees to join as a party in any action if required by law to do so in order to bring an action under the PATENT RIGHTS.

(c) LICENSEE shall reimburse HARVARD for any costs incurs with LICENSEE's approval, including reasonable attorneys' fees, as part of an action brought by LICENSEE, irrespective of whether HARVARD becomes a co-plaintiff.

8.4 If LICENSEE elects to commence an action as described above, LICENSEE may deduct from its royalty payments to HARVARD with respect to the patent(s) subject to suit an amount not exceeding [* * *] of LICENSEE's expenses and costs of such action, including reasonable attorneys' fees; provided, however, that such reduction shall not exceed [* * *] of the total royalty due to HARVARD with respect to the patent(s) subject to suit for each calendar year. If such [* * *] of LICENSEE's expenses and costs exceeds the amount of royalties deducted by LICENSEE for any calendar year, LICENSEE may to that extent reduce the royalties due to HARVARD from LICENSEE in succeeding calendar years, but never by more than [* * *] of the total royalty due in any one year with respect to the patent(s) subject to suit.

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8.5 No settlement, consent judgment or other voluntary final disposition of the suit may be entered into without the prior written consent of HARVARD which consent shall not be unreasonably withheld.

8.6 Recoveries or reimbursements from actions commenced by LICENSEE pursuant to this Article shall first be applied to reimburse LICENSEE, HARVARD for litigation costs not paid from royalties and then to reimburse HARVARD for royalties deducted by LICENSEE pursuant to Section 8.4. Any remaining recoveries or reimbursements shall be shared as follows:

(a) If the amount is lost profits or lost royalties, LICENSEE shall receive an amount equal to the damages the court determines LICENSEE has suffered as a result of the infringement less the amount of any royalties that would have been due HARVARD on sales of LICENSED PRODUCTS lost by LICENSEE as a result of the infringement had LICENSEE made such sales, and HARVARD shall receive an amount equal to the royalties it would have received if such sales had been made by LICENSEE, and

(b) As to awards other than lost profits or lost royalties, [* * *] to LICENSEE and fifty percent (50%) to HARVARD.

(c) If two or more co-exclusive licensees undertake the suit, the provision of this Section 8.6 will be modified to take into account each co-exclusive licensee's expenses and lost profits.

8.7 If LICENSEE elects not to exercise its right to prosecute an infringement of the PATENT RIGHTS pursuant to this Article, HARVARD may do so at its own expense, controlling such action and retaining all recoveries therefrom. LICENSEE shall cooperate fully with HARVARD in connection with any such action.

8.8 If a declaratory judgment action is brought naming LICENSEE as a defendant and alleging invalidity of any of the PATENT RIGHTS, HARVARD may elect to take over the sole defense of the action at its own expense. LICENSEE shall cooperate fully with HARVARD in connection with any such action. HARVARD shall consult with LICENSEE regarding such defense.

ARTICLE IX
TERMINATION OF AGREEMENT

9.1 This Agreement, unless terminated as provided herein, shall remain in effect until the last patent or patent application in PATENT RIGHTS has expired or been abandoned.

9.2 HARVARD may terminate this Agreement as follows:

(a) If LICENSEE does not make a payment due hereunder and fails to cure such non-payment (including the payment of interest in accordance with Section 5.4(e)) within

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

thirty (30) days after the date of notice in writing of such non-payment by HARVARD.

(b) If LICENSEE defaults in its obligations under Sections 10.3(c) and 10.3(d) to procure and maintain insurance.

(c) If LICENSEE shall become insolvent, shall make an assignment for the benefit of creditors, or shall have a petition in bankruptcy filed for or against it. Such termination shall be effective immediately upon HARVARD giving written notice to LICENSEE.

(d) If an examination by HARVARD's accountant pursuant to Article V shows an underreporting or underpayment by LICENSEE in excess of twenty percent (20%) for any twelve (12) month period, provided that such underreporting or underpayment is not determined to be inadvertent or the result of an honest mistake.

(e) If LICENSEE is convicted of a felony relating to the manufacture, use, or sale of LICENSED PRODUCTS.

(f) Except as provided in Subsections (a), (b), and (c) above, if LICENSEE defaults in the performance of any material obligations under this Agreement and the default has not been remedied within forty-five (45) days after the date of notice in writing of such default by HARVARD.

9.3 LICENSEE shall provide, in all sublicenses granted by it under this Agreement, that LICENSEE's interest in such sublicenses shall at HARVARD's option terminate or be assigned to HARVARD upon termination of this Agreement; however, LICENSEE shall have the option to nominate one of its sublicensees as a substitute for LICENSEE. The proposed substitute must (i) have a net worth of at least equivalent to the net worth LICENSEE had as of the date of this Agreement and (ii) have available resources and sufficient scientific, business and other expertise comparable to LICENSEE in order to satisfy its obligations under this Agreement. At least sixty (60) days prior to termination of this Agreement, LICENSEE shall provide HARVARD with written notice of LICENSEE's nominee together with documentation sufficient to demonstrate the requirements set forth in subparagraphs (i) and (ii) above for HARVARD's approval, which shall not be unreasonably withheld. HARVARD shall notify LICENSEE in writing of its decision prior to termination of this Agreement. If HARVARD approves LICENSEE's nominee, LICENSEE shall assign this Agreement to its nominee and its nominee shall accept the assignment no later than thirty (30) days after the termination date of this Agreement.

In the event that HARVARD disapproved LICENSEE's first nominee, prior to the termination date of this Agreement, LICENSEE shall have the option to nominate one of its other sublicensees for HARVARD's approval which shall not be unreasonably withheld.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

9.4 LICENSEE may terminate this Agreement by giving ninety (90) days advance written notice of termination to HARVARD. Upon termination, LICENSEE shall submit a final Royalty Report to HARVARD and any royalty payments and unreimbursed patent expenses invoiced by HARVARD shall become immediately payable.

9.5 Sections 6.1, 6.2, 6.3, 7.1, 9.4, 9.5, 10.2, 10.3, 10.4, and 10.7 of this Agreement shall survive termination.

ARTICLE X
GENERAL

10.1 HARVARD does not warrant the validity of the PATENT RIGHTS licensed hereunder and make no representations whatsoever with regard to the scope of the licensed PATENT RIGHTS or that such PATENT RIGHTS may be exploited by LICENSEE, an AFFILIATE, or SUBLICENSEE without infringing other patents, provided, however, HARVARD represents that it has no knowledge of any facts or circumstances as of the execution date of this Agreement that would render any of the PATENT RIGHTS invalid or unenforceable. HARVARD represents and warrants, to the best of its knowledge, that HARVARD owns all right, title and interest in and to the PATENT RIGHTS.

10.2 HARVARD EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES AND MAKES NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF THE PATENT RIGHTS OR INFORMATION SUPPLIED BY HARVARD, LICENSED PROCESSES OR LICENSED PRODUCTS CONTEMPLATED BY THIS AGREEMENT.

10.3 (a) LICENSEE shall indemnify, defend and hold harmless HARVARD and its current or former directors, governing board members, trustees, officers, faculty, medical and professional staff, employees, students, and agents and their respective successors, heirs and assigns (collectively, the "INDEMNITEES"), from and against any claim, liability, cost, expense, damage, deficiency, loss or obligation of any kind or nature (including, without limitation, reasonable attorney's fees and other costs and expenses of litigation) (collectively, "Claims"), based upon, arising out of, or otherwise relating to this Agreement, including without limitation any cause of action relating to product liability concerning any product, process, or service made, used or sold pursuant to any right or license granted under this Agreement, provided, however, that such indemnification shall not apply to any liability, damage, loss, or expense to the extent directly attributable to the negligent activities, reckless misconduct or intentional misconduct of Indemnitees.

(b) Each Indemnitee that intends to claim indemnification under Section 10.3(a) shall promptly notify LICENSEE of any claim or action in respect of which the Indemnitee intends to claim such indemnification, and LICENSEE shall assume the defense thereof with counsel mutually satisfactory to LICENSEE and HARVARD. The failure to deliver notice to LICENSEE within a reasonable time after the

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

commencement of any such claim or action, if materially prejudicial to its ability to defend such action, shall relieve LICENSEE of any liability to the Indemnitee under Section 10.3(a) with respect to such action, but the omission so to deliver notice to LICENSEE will not relieve it of any liability that it may have to any Indemnitee otherwise than under Section 10.3(a). HARVARD and any other Indemnitee, and their respective employees and agents, shall cooperate fully with LICENSEE and its legal representatives in the investigation of any claim or action covered by the indemnification under Section 10.3(a).

(c) Beginning at the time any such product, process or service is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by LICENSEE or by a SUBLICENSEE, AFFILIATE or agent of LICENSEE, LICENSEE shall, at its sole cost and expense, procure and maintain commercial general liability insurance in amounts not less than [* * *] per incident and [* * *] annual aggregate and naming the Indemnitees as additional insureds. During clinical trials of any such product, process or service, LICENSEE shall, at its sole cost and expense, procure and maintain commercial general liability insurance in such equal or lesser amount as HARVARD shall require, naming the Indemnitees as additional insureds. Such commercial general liability insurance shall provide: (i) product liability coverage; and (ii) broad form contractual liability coverage for LICENSEE's indemnification under this Agreement. If LICENSEE elects to self-insure all or part of the limits described above (including deductibles or retentions which are in excess of [* * *] annual aggregate) such self-insurance program must be acceptable to HARVARD and the Risk Management Foundation of the Harvard Medical Institutions, Inc. in their sole discretion. The minimum amounts of insurance coverage required shall not be construed to create a limit of LICENSEE's liability with respect to its indemnification under this Agreement.

(d) LICENSEE shall provide HARVARD with written evidence of such insurance upon request of HARVARD. LICENSEE shall provide HARVARD with written notice at least fifteen (15) days prior to the cancellation, non-renewal or material change in such insurance; if LICENSEE does not obtain replacement insurance providing comparable coverage within such fifteen (15) day period, HARVARD shall have the right to terminate this Agreement effective at the end of such fifteen (15) day period without notice or any additional waiting periods.

(e) LICENSEE shall maintain such commercial general liability insurance beyond the expiration or termination of this Agreement during: (i) the period that any product, process, or service, relating to, or developed pursuant to, this Agreement is being commercially distributed or sold by LICENSEE or by a SUBLICENSEE, AFFILIATE or agent of LICENSEE; and (ii) a reasonable period after the period referred to in Subsection (e)(i) above which in no event shall be less than fifteen (15) years.

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10.4 LICENSEE shall not use HARVARD's name or insignia, or any adaptation of them, or the name of any of HARVARD's inventors in any advertising, promotional or sales literature without the prior written approval of HARVARD.

10.5 Without the prior written approval of HARVARD in each instance, neither this Agreement nor the rights granted hereunder shall be transferred or assigned in whole or in part by LICENSEE to any person whether voluntarily or involuntarily, by operation of law or otherwise, except that each of LICENSEE and its AFFILIATES may assign this Agreement in connection with a merger, consolidation or sale or transfer of all or substantially all of its assets. This Agreement shall be binding upon the respective successors, legal representatives and assignees of HARVARD and LICENSEE.

10.6 The interpretation and application of the provisions of this Agreement shall be governed by the laws of the Commonwealth of Massachusetts.

10.7 LICENSEE shall comply with all applicable laws and regulations. In particular, it is understood and acknowledged that the transfer of certain commodities and technical data is subject to United States laws and regulations controlling the export of such commodities and technical data, including all Export Administration Regulations of the United States Department of Commerce. These laws and regulations among other things, prohibit or require a license for the export of certain types of technical data to certain specified countries. LICENSEE hereby agrees and gives written assurance that it will comply with all United States laws and regulations controlling the export of commodities and technical data, that it will be solely responsible for any violation of such by LICENSEE or its AFFILIATES or SUBLICENSEES, and that it will defend and hold HARVARD, CHILDREN, and MIT harmless in the event of any legal action of any nature occasioned by such violation.

10.8 LICENSEE agrees: (i) to obtain all regulatory approvals required for the manufacture and sale of LICENSED PRODUCTS and LICENSED PROCESSES; and (ii) to utilize appropriate patent marking on such LICENSED PRODUCTS. LICENSEE also agrees to register or record this Agreement as is required by law or regulation in any country where the license is in effect.

10.9 Any notices to be given hereunder shall be sufficient if signed by the party (or party's attorney) giving same and either: (i) delivered in person; (ii) mailed certified mail return receipt requested; or (iii) faxed to other party if the sender has evidence of successful transmission and if the sender promptly sends the original by ordinary mail, in any event to the following addresses:

If to LICENSEE:

Mycometrix Corporation
213 E. Grand Ave.
South San Francisco, CA 94080
Attention:
Fax: (650)-

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

If to HARVARD:

Office for Technology and Trademark Licensing
Harvard University
Holyoke Center, Suite 727
1350 Massachusetts Avenue
Cambridge, MA 02138
Fax: (617) 495-9568

By such notice either party may change their address for future notices.

Notices delivered in person shall be deemed given on the date delivered. Notices sent by fax shall be deemed given on the date faxed. Notices mailed shall be deemed given on the date postmarked on the envelope.

10.10 Should a court of competent jurisdiction later hold any provision of this Agreement to be invalid, illegal, or unenforceable, and such holding is not reversed on appeal, it shall be considered severed from this Agreement. All other provisions, rights and obligations shall continue without regard to the severed provision, provided that the remaining provisions of this Agreement are in accordance with the intention of the parties.

10.11 In the event of any controversy or claim arising out of or relating to any provision of this Agreement or the breach thereof, the parties shall try to settle such conflict amicably between themselves. Subject to the limitation stated in the final sentence of this Section 10.11, any such conflict which the parties are unable to resolve promptly shall be settled through arbitration conducted in accordance with the rules of the American Arbitration Association. The demand for arbitration shall be filed within a reasonable time after the controversy or claim has arisen, and in no event after the date upon which institution of legal proceedings based on such controversy or claim would be barred by the applicable statute of limitation. Such arbitration shall be held in Boston, Massachusetts. The award through arbitration shall be final and binding. Either party may enter any such award in a court having jurisdiction or may make application to such court for judicial acceptance of the award and an order of enforcement, as the case may be. Notwithstanding the foregoing, either party may, without recourse to arbitration, assert against the other party a third-party claim or cross-claim in any action brought by a third party, to which the subject matter of this Agreement may be relevant.

10.12 This Agreement constitutes the entire understanding between the parties and neither party shall be obligated by any condition or representation other than those expressly stated herein or as may be subsequently agreed to by the parties hereto in writing.

[The remainder of this page is intentionally blank.]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

PRESIDENT AND FELLOWS OF HARVARD COLLEGE	MYCOMETRIX CORPORATION
/s/ Joyce Brinton	/s/ Gajus Worthington
Joyce Brinton, Director Office for Technology and Trademark Licensing	President
12/7/00	12/10/00
Date	Date

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

APPENDIX A

The following comprise PATENT RIGHTS:

[* * *]

[* * *]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Confidential Treatment Requested by Fluidigm Corporation

Exhibit 10.6A

First Amendment

To

Co-Exclusive License Agreement

Between

PRESIDENT AND FELLOWS OF HARVARD COLLEGE

And

MYCOMETRIX CORPORATION (now Fluidigm Corporation)

Re: Harvard Case #[***]

This is the first amendment to a co-exclusive license agreement effective October 15, 2000, by and between the President and Fellows of Harvard College, with offices at 1350 Massachusetts Avenue, Suite 727, Cambridge, MA 02138 ("Harvard") and Mycometrix Corporation, a California Corporation, with offices at 213 East Grand Avenue, South San Francisco, CA 94080 ("Licensee").

WHEREAS, Licensee has changed its name to Fluidigm Corporation, and moved to a new address at 7100 Shoreline Court, South San Francisco, California 94080; and

WHEREAS, both parties desire to clarify the definition of NET SALES and to make various minor changes to the Agreement.

NOW THEREFORE, Harvard and Licensee agree as follows:

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1. Change Paragraph 1.5 to:

LICENSED PROCESSES: the processes claimed, in whole or in part, by at least one VALID CLAIM included within PATENT RIGHTS.

2. Change Paragraph 1.6 to:

LICENSED PRODUCTS: the products which are claimed, or the use of which is claimed, by at least one VALID CLAIM included within

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PATENT RIGHTS or products made or services provided in accordance with or by means of LICENSED PROCESSES.

3. Change Paragraph 1.7 to:

LICENSEE: Fluidigm Corporation, a corporation organized under the laws of California, having its principal offices at 7100 Shoreline Court, South San Francisco, California 94080.

4. Change the second full paragraph of Paragraph 1.9 to:

In the event that a LICENSED PRODUCT is sold or leased as a combination product containing the LICENSED PRODUCT and one or more other components, NET SALES shall be calculated by multiplying the gross amount invoiced for the sale of the combination product by the fraction A/A+B, where A is the average gross selling price of the LICENSED PRODUCT sold separately by LICENSEE, and B is the average gross selling price of such other components of the combination products sold separately by LICENSEE during the relevant royalty payment period. In the event a substantial number of such separate sales were not made during the relevant royalty period, then NET SALES shall be reasonably allocated by LICENSEE between such LICENSED PRODUCT and such other components of the combination based on their relative importance or value. If LICENSEE does so allocate, LICENSEE shall promptly deliver to HARVARD a written report providing a detailed explanation of how LICENSEE determined said relative importance or value. In the event that HARVARD disagrees with the determination made by LICENSEE of said allocation of importance or value, HARVARD shall so notify LICENSEE in writing, and a representative of LICENSEE and a representative of HARVARD shall meet in order to discuss and resolve such disagreement. If such disagreement cannot be resolved within sixty (60) days, such disagreement shall be subject to resolution in accordance with Section 10.11.

5. Add the following sentence to the end of Paragraph 1.10:

In addition, SERVICE INCOME shall be subject to the following deductions:

i) customary trade, quantity or cash discounts and non-affiliated broker's or agents' commissions actually allowed and taken;

ii) amounts repaid or credited by reason of rejection; and

iii) to the extent separately stated on purchase orders, invoices, or other documents of sale, taxes levied on and/or other governmental

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charges made as to performance, production, sale or use and paid by or on behalf of LICENSE.

6. Change Paragraph 1.15 to:

VALID CLAIM: either (i) a claim of an issued patent that has not been held unenforceable or invalid by an agency or a court of competent jurisdiction in any unappealable or unappealed decision or (ii) a claim of a pending patent application that has not been abandoned or finally rejected without the possibility of appeal or refiling and that has been pending for less than six (6) years from the earlier of a) the first priority date of such patent application or b) the effective date of this Agreement.

7. Change Paragraph 3.2(c) to:

LICENSEE shall use commercially reasonable efforts to effect introduction of the LICENSED PRODUCTS into the commercial market as soon as practicable, consistent with sound and reasonable business practice and judgment; thereafter, until the expiration of this Agreement, LICENSEE shall endeavor to keep LICENSED PRODUCTS reasonably available to the public, in each case consistent with industry practices for similar companies and similar products.

8. Replace the last two sentences of Paragraph 3.2(e) with:

“Copies of all sublicense agreements shall be promptly provided to HARVARD. If a sublicense agreement is part of a larger agreement (i.e., one that includes a business relationship in addition to a sublicense agreement), LICENSEE need only send the part of said larger agreement that is the sublicense agreement. HARVARD agrees to maintain any information contained in such sublicensing agreements in confidence, except as otherwise required by law, however, HARVARD may include in its usual reports annual amounts of royalties paid.”

9. In Paragraph 5.3 delete “in each country”, so LICENSEE needs to report the date of first sale in the first country to have a sale, but LICENSEE still needs to report the date of first sale for each LICENSED PRODUCT.

10. Replace Paragraph 6.2 with:

“HARVARD’s accountant shall not disclose to HARVARD any information other than whether the reports are correct or not, the reasons for any incorrectness and the amount of any discrepancies.”

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

11. Add new Paragraph 6.4:

"Such examination by HARVARD's accountant shall take place not more than once in each calendar year."

12. Change Paragraph 9.2(d) to:

"If an examination by HARVARD's accountant pursuant to Article V shows an underreporting or underpayment by LICENSEE in excess of twenty (20%) percent for any twelve (12) month period and HARVARD's accountant determines said underreporting or underpayment was not inadvertent or not the result of an honest mistake on LICENSEE's part. In that event, LICENSEE may promptly request HARVARD to have its accountant's findings reviewed by another independent certified public accounting firm of nationally recognized standing reasonably acceptable to LICENSEE, the total cost of which will be invoiced to LICENSEE and paid within thirty (30) days. If said review indicates said underreporting or underpayment by LICENSEE was inadvertent or the result of an honest mistake then HARVARD will not terminate this Agreement.

13. In Paragraph 10.9, change lines 6-11 to:

If to LICENSEE:

Fluidigm Corporation
7100 Shoreline Court
South San Francisco, CA 94080
Attention: General Counsel
Fax: 650-871-7195

In all other respects the co-exclusive License Agreement, effective October 15, 2000, shall remain the same. This amendment shall become effective upon both parties signing below, and have an effective date of January 1, 2005.

IN WITNESS WHEREOF, the parties hereto have caused this second amendment to be executed by their duly authorized representatives.

PRESIDENT AND FELLOWS OF HARVARD COLLEGE:	**FLUIDIGM CORPORATION:**
/s/ Joyce Brinton	/s/ Gajus Worthington
Joyce Brinton Director Office for Technology and Trademark Licensing	Printed: Gajus Worthington Title: President & CEO
Date: 12/22/04	Date: 12/23/04

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

4060.LICI.008 Harvard

CO-EXCLUSIVE LICENSE AGREEMENT

Between

President and Fellows of Harvard College

And

Mycometrix Corporation

Effective as of October 15, 2000

Re: Harvard Case #[***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

In consideration of the mutual promises and covenants set forth below, the parties hereto agree as follows:

ARTICLE I
DEFINITIONS

As used in this Agreement, the following terms shall have the following meanings:

1.1 ACADEMIC RESEARCH PURPOSES: use of PATENT RIGHTS for academic research or other not-for-profit scholarly purposes which are undertaken at a non-profit or governmental institution that does not use the PATENT RIGHTS in the production or manufacture of products for sale or the performance of services for a fee.

1.2 AFFILIATE: any entity which controls, is controlled by, or is under common control with a party by ownership or control of at least fifty percent (50%) of the voting stock or other ownership. Unless otherwise specified, the term LICENSEE includes AFFILIATES.

1.3 FIELD: use of PATENT RIGHTS to develop, manufacture, use, offer for sale, sell, or import components and products in FIELD I and/or FIELD II:

FIELD I: [***]

FIELD II: [***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1.4 HARVARD: President and Fellows of Harvard College, a nonprofit Massachusetts educational corporation having offices at the Office for Technology and Trademark Licensing, Holyoke Center, Suite 727, 1350 Massachusetts Avenue, Cambridge, Massachusetts 02138.

1.5 LICENSED PROCESSES: the processes covered by at least one VALID CLAIM included within the PATENT RIGHTS.

1.6 LICENSED PRODUCTS: products covered by at least one VALID CLAIM included within the PATENT RIGHTS or products made or services provided in accordance with or by means of LICENSED PROCESSES.

1.7 LICENSEE: Mycometrix Corporation, a corporation organized under the laws of Califonia having its principal offices at 213 East Grand Avenue, South San Francisco, CA 94080.

1.8 NET SERVICE INCOME: SERVICE INCOME less LICENSEE'S actual direct and indirect cost for research, development and/or services provided.

1.9 NET SALES: the amount actually received for sales, leases, or other transfers of LICENSED PRODUCTS, less:

(i) customary trade, quantity or cash discounts and non-affiliated brokers' or agents' commissions actually allowed and taken;

(ii) amounts repaid or credited by reason of rejection or return;

(iii) to the extent separately stated on purchase orders, invoices, or other documents of sale, taxes levied on and/or other governmental charges made as to production, sale, transportation, delivery or use and paid by or on behalf of LICENSEE; and

(iv) reasonable charges for delivery or transportation provided by third parties and cost of insurance in transit, if separately stated.
NET SALES also includes the fair market value of any non-cash consideration received by LICENSEE for the sale, lease, or transfer of LICENSED PRODUCTS.

If a LICENSED PRODUCT is sold as a combination product containing the LICENSED PRODUCT and one or more other components, NET SALES shall be calculated by multiplying the gross amount invoiced for the sale of the combination product by the fraction A/A+B where A is the average gross selling price of the LICENSED PRODUCT sold separately by LICENSEE and B is the average gross selling price of such other components of the combination products sold separately by LICENSEE during the relevant royalty payment period.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

In the event that LICENSEE grants a sublicensee hereunder, and receives payments based upon SUBLICENSEE's sales of LICENSED PRODUCTS, LICENSEE may upon approval from HARVARD (which shall not be unreasonably withheld) modify the definition of NET SALES for the purposes of calculating royalties payable to HARVARD on such SUBLICENSEE's sales to be the same as the definition of NET SALES on which such royalties to LICENSEE are calculated.

1.10 SERVICE INCOME: the total financial consideration received by LICENSEE for commercial services performed on a fee-for-service basis using the LICENSED PRODUCTS or LICENSED PROCESSES by LICENSEE under a contract with a third party, where such services are based primarily on the use of fully functional LICENSED PRODUCTS or LICENSED PROCESSES (as applicable) for their intended commercial use (such as, for example, where LICENSEE performs commercial-scale genotyping services for a pharmaceutical company on a fee-for-service basis using fully developed microfluidics chips comprising LICENSED PRODUCTS). SERVICE INCOME shall not include amounts received in connection with research and/or development of LICENSED PRODUCTS or LICENSED PROCESSES themselves.

1.11 PATENT RIGHTS: The applications and patents filed on the basis of the disclosure attached in Appendix A of this Agreement, the allowed claims of such applications, the inventions described and claimed therein, and any divisions or continuations of the applications and patents, and specific claims of any continuations-in-part of such applications to the extent the specific claims are directed to subject matter described in the applications and patents in a manner sufficient to support such specific claims under 35 U.S.C., patents issuing thereon or reissues thereof, and any and all foreign patents and patent applications corresponding thereto, all to the extent owned or controlled by HARVARD.

1.12 SUBLICENSE INCOME: the amount paid to LICENSEE by a third party (other than an AFFILIATE of LICENSEE) (a) for the sublicening of PATENT RIGHTS to a third party as well as (b) for the related licensing of LICENSEE's own patent rights or know-how or LICENSEE's in-licensed non-HARVARD technologies, including but not limited to (i) license fees, (ii) milestone payments, (iii) royalties, (iv) the fair market value in cash of any non-cash consideration for such sublicense, and (v) in the event that LICENSEE receives any payment for equity in consideration for the grant of sublicense rights that included a premium over the fair market value of such equity, the amount of such premium. LICENSEE shall be responsible for determining such fair market value with reasonable business judgment.

1.13 SUBLICENSEE: any non-AFFILIATE granted a sublicense of any of the rights HARVARD has granted to LICENSEE under Section 3.1.

1.14 TERRITORY: Worldwide.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1.15 VALID CLAIM: either (i) a claim of an issued patent that has not been held unenforceable or invalid by an agency or a court of competent jurisdiction in any unappealable or unappealed decision or (ii) a claim of a published, pending patent application, which claim is substantially identical to a corresponding claim in a subsequently issued patent having priority to the patent application.

1.16 The terms “Public Law 96-517” and “Public Law 98-620” include all amendments to those statutes.

1.17 The terms “sold” and “sell” include, without limitation, leases and other transfers and similar transactions.

ARTICLE II
REPRESENTATIONS

2.1 HARVARD is or will be owner by assignment from [***] in the US and foreign patent applications corresponding thereto, and in the inventions described and claimed therein. Inventorship will be finalized at the time of the US utility filing or in the near future when it is necessary.

2.2 HARVARD has authority to issue licenses under PATENT RIGHTS.

2.3 HARVARD is committed to the policy that ideas or creative works produced at HARVARD should be used for the greatest possible public benefit, and believes that every reasonable incentive should be provided for the prompt introduction of such ideas into public use, all in a manner consistent with the public interest.

2.4 LICENSEE is prepared and intends to diligently develop the invention and to bring products to market which are subject to this Agreement, specifically including one or more products in the FIELD selected from a [***].

2.5 LICENSEE is desirous of obtaining a co-exclusive license in the FIELD and in the TERRITORY in order to practice the PATENT RIGHTS in the United States and in certain foreign countries, and to manufacture, use and sell in the commercial market the products made in accordance therewith, and HARVARD is desirous of granting such a license to LICENSEE in accordance with the terms of this Agreement.

ARTICLE III
GRANT OF RIGHTS

3.1 HARVARD hereby grants to LICENSEE and LICENSEE accepts, subject to the terms and conditions hereof, in the TERRITORY a co-exclusive commercial license under PATENT

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RIGHTS in FIELD I and in FIELD II to make and have made, to use and have used, to sell and have sold, and to offer for sale and have offered for sale the LICENSED PRODUCTS, and to practice the LICENSED PROCESSES, for the life of the PATENT RIGHTS. HARVARD will grant no more than two commercial licenses in FIELD I at any time and will grant no more than two commercial licenses in FIELD II at any time and HARVARD will not grant other licenses in the FIELD except as required by HARVARD's obligations in Section 3.2(a) or as permitted Section 3.2(b). Such co-exclusive license shall include the right to grant sublicenses under the following circumstances: (i) LICENSEE can demonstrate that it has added significant value to the PATENT RIGHTS to be sublicensed, and that such a sublicense also contains a substantial and essentially simultaneous license of LICENSEE owned intellectual property, or (ii) LICENSEE grants a sublicense under other HARVARD patent rights licensed exclusively to LICENSEE which are dominated by PATENT RIGHTS, and such sublicense under PATENT RIGHTS is necessary to practice such other HARVARD patent rights.

3.2 The granting and exercise of this license is subject to the following conditions:

(a) HARVARD's "Statement of Policy in Regard to Inventions, Patents and Copyrights," dated August 10, 1998, Public Law 96-517, Public Law 98-620. In addition, this Agreement is subject to HARVARD's obligations under agreements with other sponsors of research, provided that such obligations are not in conflict with the rights granted hereunder. Any right granted in this Agreement greater than that permitted under Public Law 96-517, or Public Law 98-620, shall be subject to modification as may be required to conform to the provisions of those statutes.

(b) HARVARD reserves the right to make and use, and grant to others non-exclusive licenses to make and use solely for ACADEMIC RESEARCH PURPOSES the subject matter described and claimed in PATENT RIGHTS.

(c) LICENSEE shall use commercially reasonable efforts to effect introduction of the LICENSED PRODUCTS into the commercial market as soon as practicable, consistent with sound and reasonable business practice and judgment; thereafter, until the expiration of this Agreement, LICENSEE shall endeavor to keep LICENSED PRODUCTS reasonably available to the public.

(d) At any time after three years from the effective date of this Agreement and as HARVARD's sole remedy for such non-performance, HARVARD may increase the license maintenance royalty under Section 4.4 to [***] dollars each in FIELD I and in FIELD II in year 2004 and [***] dollars each in FIELD I and in FIELD II per year each year beginning in 2005, if in HARVARD's reasonable judgment, the Progress Reports furnished by LICENSEE do not demonstrate that LICENSEE has satisfied at least one of the following conditions, which non-performance is not cured within ninety (90) days following the written notification of such by HARVARD to LICENSEE:

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(i) has put the licensed subject matter into commercial use in at least one of the countries hereby licensed, directly or through a sublicense, and is keeping the licensed subject matter reasonably available to the public; or

(ii) is engaged in research, development, manufacturing, marketing or sublicensing activity appropriate to achieving 3.2(d)(i).

(e) In all sublicenses granted by LICENSEE hereunder, LICENSEE shall include a requirement that the SUBLICENSEE use commercially reasonable efforts to bring the subject matter of the sublicense into commercial use. LICENSEE shall further provide in such sublicenses that such sublicenses are subject and subordinate to the terms and conditions of this Agreement, except: (i) the SUBLICENSEE may not further sublicense; and (ii) the rate of royalty on NET SALES paid by the SUBLICENSEE to the LICENSEE. Copies of the relevant provisions of all sublicense agreements shall be provided promptly to HARVARD. HARVARD agrees to maintain any information contained in such provisions in confidence, except as otherwise required by law, however, HARVARD may include in its usual reports annual amounts of royalties paid.

(f) A license in any other field of use in addition to the FIELD shall be the subject of a separate agreement and shall require LICENSEE's submission of evidence, satisfactory to HARVARD, demonstrating LICENSEE's willingness and ability to develop and commercialize in such other field of use the kinds of products or processes likely to be encompassed in such other fields.

(g) To the extent that federal funds are used to support research leading to a patent or patent application in the PATENT RIGHTS, LICENSEE shall cause any LICENSED PRODUCT produced for sale by LICENSEE or SUBLICENSEES in the United States to be manufactured substantially in the United States during the period of exclusivity of this license in the United States.

3.4 All rights reserved to the United States Government and others under Public Law 96-517, and Public Law 98-620, shall remain and shall in no way be affected by this Agreement.

ARTICLE IV
ROYALTIES

4.1 LICENSEE shall pay to HARVARD a non-refundable license royalty fee in the sum of [***] payable within thirty (30) days of the execution date of this Agreement.

4.2 (a) In consideration of the right and license granted herein, LICENSEE shall pay to HARVARD during the term of this Agreement a royalty of [***] on NET SALES of LICENSED PRODUCTS sold by LICENSEE.

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(b) In the event that a single LICENSED PRODUCT or LICENSED PROCESS is covered by HARVARD intellectual property in addition to PATENT RIGHTS, which is licensed to LICENSEE under other agreements as of the date of this Agreement, then the total royalty payment due HARVARD under all such agreements including this Agreement shall be [***] of NET SALES. LICENSEE shall notify HARVARD of the identity of each license agreement that includes patent rights covering the product or process, and HARVARD shall distribute the royalties evenly among such agreements.

(c) As consideration for the rights granted hereunder, LICENSEE shall pay to HARVARD during the term of this Agreement a royalty in the form of stock of LICENSEE as follows:

(i) LICENSEE shall issue to HARVARD [***] shares of the Common Stock of LICENSEE ("Shares") pursuant to the terms of a mutually acceptable Stock Subscription Agreement, provided, however, that HARVARD shall be subject to and enter into appropriate agreements and related documents as required of other stockholders of LICENSEE.

(ii) HARVARD represents and warrants to LICENSEE that:

(1) HARVARD is acquiring the Shares for its own account for investment and not with a view to, or for sale in connection with any distribution thereof, nor with any present intention of distributing or selling the same; and HARVARD has no present or contemplated agreement, undertaking, arrangement, obligation, indebtedness or commitment providing for the disposition thereof.

(2) HARVARD has full power and authority to enter into and to perform this Agreement in accordance with its terms.

(3) HARVARD has sufficient knowledge and experience in investing in companies similar to LICENSEE so as to be able to evaluate the risks and merits of its investment in LICENSEE and is able financially to bear the risks thereof.

(iii) Each certificate representing the Shares shall bear a legend substantially in the following form:

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"The shares represented by this certificate have not been registered under the Securities Act of 1933 or any state securities law and they may not be sold or otherwise transferred by any person, including a pledgee, unless (1) either (a) a registration statement with respect to such shares shall be effective under the Securities Act of 1933, as amended, or (b) the Corporation shall have received an opinion of counsel satisfactory to the Corporation that an exemption from registration under such Act is then available, and (2) there shall have been compliance with all applicable securities laws."

"The shares represented by this certificate are subject to a mutually agree-upon Stock Purchase and Right of First Refusal Agreement with this Corporation, a copy of which Stock Purchase and Right of First Refusal Agreement is available for inspection at the offices of the Corporation or may be made available upon request."

The foregoing legend shall be removed from the certificates representing any Shares, at the request of the holder thereof, at such time as they become eligible for resale pursuant to the Securities Act of 1933, as amended.

If at any time prior to the time the Shares are eligible for resale pursuant to an exemption from registration under the Securities Act of 1933, as amended, LICENSEE proposes to register any of its Common Stock, under the Securities Act of 1933, except at LICENSEE's initial public offering or any offering pursuant to Forms S-4 or S-8, LICENSEE shall offer HARVARD the opportunity to have its Shares registered under the registration statement to be filed at such time. HARVARD will be offered the right to register its Shares under the same terms, conditions and restrictions as other shareholders with piggyback registration rights and the inclusion of any Shares in such registration statement shall be subject to the approval of the underwriters of such offering

(iv) HARVARD's ownership rights to Shares shall not be affected should the license pursuant to this Agreement be converted to a nonexclusive one.

(d) In the case of sublicenses, LICENSEE shall also pay to HARVARD a royalty of [***] of SUBLICENSE INCOME. If compensation for such a sublicense of PATENT RIGHTS is bundled with compensation received for the sublicensing of the other HARVARD patent rights licensed to LICENSEE under other agreements as of the date of this Agreement, LICENSEE shall pay HARVARD only [***] of the total compensation received no matter how many license agreements from HARVARD are involved. In such a case, LICENSEE shall notify HARVARD of the identity of each license agreement involved and HARVARD shall distribute its [***] of

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compensation equally among those license agreements, including this Agreement.

(e) LICENSEE shall pay HARVARD [***] of NET SERVICE INCOME. If SERVICE INCOME is bundled with service income under another license to LICENSEE as of the date of this Agreement, LICENSEE shall pay a royalty of [***] of NET SERVICE INCOME received from each and every third party ("Third Party") to which services are provided. LICENSEE shall notify HARVARD of the identity of each license agreement involved in the services and HARVARD shall distribute its [***] of compensation equally among those license agreements, including this Agreement.

(f) If other co-exclusive licenses in the same FIELD and TERRITORY are granted after the date this Agreement is executed, the above financial compensation shall not exceed the financial compensation to be paid by other licensees in the same FIELD and TERRITORY during the term of the co-exclusive license provided LICENSEE accepts any less favorable terms included in such other license.

If stock is part of the financial compensation to be paid by other licensees in the same FIELD and TERITORY, the fair market value of the stock shall be the same as the price per share which other investors paid in the last round of financing unless the stock is publicly traded.

4.3 On sales between LICENSEE and its AFFILIATES for resale or incorporation into products, the royalty shall be paid on the NET SALES of the AFFILIATE. On sales between LICENSEE and sublicensees for resale, the royalty shall be paid on the SUBLICENSE INCOME.

4.4 No later than January 1 of each calendar year indicated below, LICENSEE shall pay to HARVARD the following non-refundable license maintenance royalty and/or advance on royalties. Such payments shall be credited against running royalties due for that calendar year and Royalty Reports shall reflect such a credit. Such payments shall not be credited against milestone payments (if any) nor against royalties due for any subsequent calendar year nor against such payments due under any other agreements with HARVARD.

	FIELD I	FIELD II
January 1, 2002	[***]	[***]
January 1, 2003	[***]	[***]
January 1, 2004	[***]	[***]
each year thereafter	[***]	[***]

ARTICLE V
REPORTING

5.1 Prior to signing this Agreement, LICENSEE has provided to HARVARD a written business plan under which LICENSEE intends to bring the subject matter of the licenses

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granted hereunder into commercial use upon execution of this Agreement. Such plan includes proposed marketing efforts.

5.2 No later than sixty (60) days after June 30 of each calendar year, LICENSEE shall provide to HARVARD a written annual Progress Report describing progress on research and development, regulatory approvals, manufacturing, sublicensing, marketing and sales during the most recent twelve (12) month period ending June 30 and plans for the forthcoming year. If multiple technologies are covered by the license granted hereunder, the Progress Report shall provide the information set forth above for each technology. If progress differs from that anticipated in the plan required under Section 5.1, LICENSEE shall explain the reasons for the difference and propose a modified plan for HARVARD's review. LICENSEE shall also provide any reasonable additional data HARVARD requires to evaluate LICENSEE's performance.

5.3 LICENSEE shall report to HARVARD the date of first sale of LICENSED PRODUCTS (or results of LICENSED PROCESSES) in each country within thirty (30) days of occurrence.

5.4 (a) LICENSEE shall submit to HARVARD within sixty (60) days after each calendar half year ending June 30 and December 31, a Royalty Report setting forth for such half year at least the following information:

(i) the number of LICENSED PRODUCTS sold by LICENSEE in each country;

(ii) total billings and amounts actually received for such LICENSED PRODUCTS;

(iii) an accounting for all LICENSED PROCESSES used or sold;

(iv) deductions applicable to determine the NET SALES thereof;

(v) the amount of SERVICE INCOME received by LICENSEE and an accounting of all deductions to yield NET SERVICE INCOME;

(vi) the amount of SUBLICENSE INCOME received by LICENSEE; and

(vii) the amount of royalty due thereon, or, if no royalties are due to HARVARD for any reporting period, the statement that no royalties are due.

Such report shall be certified as correct by an officer of LICENSEE and shall include a detailed listing of all deductions from royalties.

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(b) LICENSEE shall pay to HARVARD with each such Royalty Report the amount of royalty due with respect to such half year. If multiple technologies are covered by the license granted hereunder, LICENSEE shall specify which PATENT RIGHTS are utilized for each LICENSED PRODUCT and LICENSED PROCESS included in the Royalty Report.

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(c) All payments due hereunder shall be deemed received when funds are credited to HARVARD's bank account and shall be payable by check or wire transfer in United States dollars. Conversion of foreign currency to U.S. dollars shall be made at the conversion rate existing in the United States (as reported in the New York Times or the Wall Street Journal) on the last working day of each royalty period. No transfer, exchange, collection or other charges shall be deducted from such payments.

(d) All such reports shall be maintained in confidence by HARVARD except as required by law; however, HARVARD may include in its usual reports annual amounts of royalties paid.

(e) Late payments shall be subject to a charge of one and one-half percent (1.5%) per month, or $250, whichever is greater.

5.5 In the event of acquisition, merger, change of corporate name or change in make-up, organization, or identity, LICENSEE shall notify HARVARD in writing within thirty (30) days of such event.

5.6 If by law, regulation or fiscal policy of a particular country, conversion into United States dollars or transfer of funds of a convertible currency to the United States is restricted or forbidden, LICENSEE shall give HARVARD prompt notice in writing and shall pay the royalty and other amounts due through such means or methods as are lawful in such country as HARVARD may reasonably designate. Failing the designation by HARVARD of such lawful means or methods within thirty (30) days after such notice is given to HARVARD, LICENSEE shall deposit such royalty or other payment in local currency to the credit of HARVARD in a recognized banking institution designated by HARVARD, or if none is designated by HARVARD within the thirty (30) day period described above, in a recognized banking institution selected by LICENSEE and identified in a written notice to HARVARD by LICENSEE, and such deposit shall fulfill all obligations of LICENSEE to HARVARD with respect to such royalties. When in any country in which the law or regulations prohibit both the transmittal and deposit of royalties on sales in such country, royalty payments shall be suspended for as long as such prohibition is in effect, and as soon as such prohibition ceases to be in effect, all royalties which LICENSEE would have been under obligation to transmit or deposit, but for the prohibition, shall be deposited or transmitted promptly to the extent allowable.

ARTICLE VI
RECORD KEEPING

6.1 LICENSEE shall keep, and shall require its SUBLICENSEES to keep, accurate records (together with supporting documentation) of LICENSED PRODUCTS made, used or sold under this Agreement, and SERVICE INCOME and SUBLICENSE INCOME received by LICENSEE under this Agreement, appropriate to determine the amount of royalties due to HARVARD hereunder. Such records shall be retained for three (3) years following the end of the reporting period to which they relate. For such three year period, they shall be

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available during normal business hours upon reasonable advance notice for examination by a certified public accountant selected by HARVARD, and reasonably acceptable to LICENSEE, for the sole purpose of verifying reports and payments hereunder. In conducting examinations pursuant to this Section 6.1, HARVARD's accountant shall have access to all records which HARVARD reasonably believes to be relevant to the calculation of royalties under Article IV. HARVARD agrees to maintain any information contained in such records in confidence, except as otherwise required by law and except information in regarding the amount of royalties due.

6.2 HARVARD's accountant shall not disclose to HARVARD any information other than information relating to the accuracy of reports and payments made hereunder.

6.3 Such examination by HARVARD's accountant shall be at HARVARD's expense, except that if such examination shows an underreporting or underpayment in excess of five percent (5%) for any twelve (12) month period, then LICENSEE shall pay the cost of such examination as well as any additional sum that would have been payable to HARVARD had the LICENSEE reported correctly, plus interest on said sum at the rate of one and one-half percent (1.5%) per month.

ARTICLE VII
DOMESTIC AND FOREIGN PATENT FILING AND MAINTENANCE

7.1 Upon execution of this Agreement, LICENSEE shall reimburse HARVARD for fifty percent (50%) of all reasonable expenses HARVARD has incurred for the preparation, filing, prosecution, maintenance and counseling with respect to PATENT RIGHTS. Such expenses total [***] as of October 1, 2000. Thereafter, LICENSEE shall reimburse HARVARD for fifty percent (50%) of all such future reasonable expenses prior to the termination of this Agreement upon receipt of invoices from HARVARD.

7.2 HARVARD shall be responsible for the preparation, filing, prosecution and maintenance of any and all patent applications and patents included in PATENT RIGHTS. HARVARD will instruct counsel to directly notify HARVARD and LICENSEE and provide them copies of any official communications from the United States and foreign patent offices relating to said prosecution, and to provide LICENSEE with advance draft copies of all relevant communications to the various patent offices, so that LICENSEE may be informed and apprised of the continuing prosecution of patent applications in PATENT RIGHTS. LICENSEE shall have reasonable opportunities to participate in decision making on all key decisions affecting filing, prosecution and maintenance of patents and patent applications in PATENT RIGHTS. HARVARD will use reasonable efforts to incorporate LICENSEE's reasonable suggestions regarding said prosecution. HARVARD shall use all reasonable efforts to amend any patent application to include claims reasonably requested by LICENSEE to protect LICENSED PRODUCTS.

7.3 HARVARD and LICENSEE shall cooperate fully in the preparation, filing, prosecution and maintenance of PATENT RIGHTS and of all patents and patent applications licensed to LICENSEE hereunder, executing all papers and instruments or requiring members of

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HARVARD to execute such papers and instruments so as to enable HARVARD to apply for, to prosecute and to maintain patent applications and patents in HARVARD's name in any country. Each party shall provide to the other prompt notice as to all matters which come to its attention and which may affect the preparation, filing, prosecution or maintenance of any such patent applications or patents.

7.4 LICENSEE may elect to surrender its PATENT RIGHTS in any country upon sixty (60) days written notice to HARVARD. Such notice shall not relieve LICENSEE from responsibility to reimburse HARVARD for patent-related expenses incurred prior to the expiration of the (60) day notice period.

7.5 If HARVARD elects not to prosecute or maintain any of the patents or patent applications relating to PATENT RIGHTS or any portion thereof in any country, LICENSEE shall be given sufficient notice of HARVARD's decision so that LICENSEE may request that HARVARD continue prosecuting or maintaining such patents or patent applications, at LICENSEE's expense. If HARVARD elects not to prosecute or maintain such patents or patent applications after such request by LICENSEE, then LICENSEE shall have the right, but not the obligation, at its own expense to prosecute and maintain such patents and patent applications or portion thereof in such country and in HARVARD's name. If LICENSEE assumes 100% of the costs to file, prosecute, and maintain certain patents and patent applications relating to the PATENT RIGHTS pursuant to this Section 7.5, and, if HARVARD licenses the PATENT RIGHTS to one or more co-exclusive licensees designated in Section 3.1 after such time, then HARVARD will credit LICENSEE with the costs LICENSEE has paid in excess of 50% if one other licensee, due for the preparation, filing, prosecution and maintenance of patents and patent applications relating to PATENT RIGHTS pursuant to Section 7.1 above.

7.6 If LICENSEE can demonstrate that it is not being adequately informed or apprised of the continuing prosecution of patents or patent applications in PATENT RIGHTS, or that it is not being provided with reasonable opportunities to participate in decision making or that its interests are not being adequately protected, LICENSEE shall be entitled to engage, at LICENSEE's expense, independent patent counsel to review and evaluate patent prosecution and filing of patents and patent applications included in PATENT RIGHTS.

ARTICLE VIII
INFRINGEMENT

8.1 With respect to any PATENT RIGHTS that are licensed to LICENSEE pursuant to this Agreement, LICENSEE shall have the right to prosecute in its own name and at its own expense any infringement of such patent. HARVARD agrees to notify LICENSEE promptly of each infringement of such patents of which HARVARD, as applicable, is or becomes aware. Before LICENSEE commences an action with respect to any infringement of such patents, LICENSEE shall give careful consideration to the views of HARVARD and to potential effects on the public interest in making its decision whether or not to sue.

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8.2 LICENSEE acknowledges that other co-exclusive licensees of PATENT RIGHTS designated in Section 3.1 shall have rights identical to LICENSEE to prosecute infringers and that co-exclusive licensees will be bound by the identical terms of this Section 8.2. In any prosecution instigated by LICENSEE and in which HARVARD, as necessary, is also named plaintiff as owner of the PATENT RIGHTS, LICENSEE must notify other co-exclusive licensees of the existence of such legal action and allow other co-exclusive licensees to join as a plaintiff upon co-exclusive licensees' request. In addition, in the event other co-exclusive licensees instigate an infringement prosecution, LICENSEE hereby consents to being joined as a plaintiff in such suit solely for the purpose of procuring standing to bring the action and at the sole expense of the instigating co-exclusive licensee. To the extent that LICENSEE desires to participate in any strategic decisions affecting the prosecution of the action brought by other co-exclusive licensees, LICENSEE acknowledges that it and co-exclusive licensees will necessarily have to reach a mutual agreement concerning litigation expenses and strategy. In no event shall HARVARD incur any liability or expense in connection with any action of co-exclusive licensees, joint or otherwise.

During any such litigation, HARVARD will agree to not license any defendant or accused infringer of the PATENT RIGHTS in the litigation, without LICENSEE'S prior written consent.

8.3 (a) If LICENSEE elects to commence an action as described above, HARVARD may, to the extent permitted by law, elect to join as parties in that action. Regardless of whether HARVARD elects to join as parties, HARVARD shall cooperate fully with LICENSEE in connection with any such action.

(b) HARVARD agrees to join as a party in any action if required by law to do so in order to bring an action under the PATENT RIGHTS.

(c) LICENSEE shall reimburse HARVARD for any costs incurs with LICENSEE's approval, including reasonable attorneys' fees, as part of an action brought by LICENSEE, irrespective of whether HARVARD becomes a co-plaintiff.

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8.4 If LICENSEE elects to commence an action as described above, LICENSEE may deduct from its royalty payments to HARVARD with respect to the patent(s) subject to suit an amount not exceeding fifty percent (50%) of LICENSEE's expenses and costs of such action, including reasonable attorneys' fees; provided, however, that such reduction shall not exceed fifty percent (50%) of the total royalty due to HARVARD with respect to the patent(s) subject to suit for each calendar year. If such fifty percent (50%) of LICENSEE's expenses and costs exceeds the amount of royalties deducted by LICENSEE for any calendar year, LICENSEE may to that extent reduce the royalties due to HARVARD from LICENSEE in succeeding calendar years, but never by more than fifty percent (50%) of the total royalty due in any one year with respect to the patent(s) subject to suit.

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8.5 No settlement, consent judgment or other voluntary final disposition of the suit may be entered into without the prior written consent of HARVARD which consent shall not be unreasonably withheld.

8.6 Recoveries or reimbursements from actions commenced by LICENSEE pursuant to this Article shall first be applied to reimburse LICENSEE, HARVARD for litigation costs not paid from royalties and then to reimburse HARVARD for royalties deducted by LICENSEE pursuant to Section 8.4. Any remaining recoveries or reimbursements shall be shared as follows:

(a) If the amount is lost profits or lost royalties, LICENSEE shall receive an amount equal to the damages the court determines LICENSEE has suffered as a result of the infringement less the amount of any royalties that would have been due HARVARD on sales of LICENSED PRODUCTS lost by LICENSEE as a result of the infringement had LICENSEE made such sales, and HARVARD shall receive an amount equal to the royalties it would have received if such sales had been made by LICENSEE, and

(b) As to awards other than lost profits or lost royalties, fifty percent (50%) to LICENSEE and fifty percent (50%) to HARVARD.

(c) If two or more co-exclusive licensees undertake the suit, the provision of this Section 8.6 will be modified to take into account each co-exclusive licensee's expenses and lost profits.

8.7 If LICENSEE elects not to exercise its right to prosecute an infringement of the PATENT RIGHTS pursuant to this Article, HARVARD may do so at its own expense, controlling such action and retaining all recoveries therefrom. LICENSEE shall cooperate fully with HARVARD in connection with any such action.

8.8 If a declaratory judgment action is brought naming LICENSEE as a defendant and alleging invalidity of any of the PATENT RIGHTS, HARVARD may elect to take over the sole defense of the action at its own expense. LICENSEE shall cooperate fully with HARVARD in connection with any such action. HARVARD shall consult with LICENSEE regarding such defense.

ARTICLE IX
TERMINATION OF AGREEMENT

9.1 This Agreement, unless terminated as provided herein, shall remain in effect until the last patent or patent application in PATENT RIGHTS has expired or been abandoned.

9.2 HARVARD may terminate this Agreement as follows:

(a) If LICENSEE does not make a payment due hereunder and fails to cure such non-payment (including the payment of interest in accordance with Section 5.4(e)) within

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thirty (30) days after the date of notice in writing of such non-payment by HARVARD.

(b) If LICENSEE defaults in its obligations under Sections 10.3(c) and 10.3(d) to procure and maintain insurance.

(c) If LICENSEE shall become insolvent, shall make an assignment for the benefit of creditors, or shall have a petition in bankruptcy filed for or against it. Such termination shall be effective immediately upon HARVARD giving written notice to LICENSEE.

(d) If an examination by HARVARD's accountant pursuant to Article V shows an underreporting or underpayment by LICENSEE in excess of twenty percent (20%) for any twelve (12) month period, provided that such underreporting or underpayment is not determined to be inadvertent or the result of an honest mistake.

(e) If LICENSEE is convicted of a felony relating to the manufacture, use, or sale of LICENSED PRODUCTS.

(f) Except as provided in Subsections (a), (b), and (c) above, if LICENSEE defaults in the performance of any material obligations under this Agreement and the default has not been remedied within forty-five (45) days after the date of notice in writing of such default by HARVARD.

9.3 LICENSEE shall provide, in all sublicenses granted by it under this Agreement, that LICENSEE's interest in such sublicenses shall at HARVARD's option terminate or be assigned to HARVARD upon termination of this Agreement; however, LICENSEE shall have the option to nominate one of its sublicensees as a substitute for LICENSEE. The proposed substitute must (i) have a net worth of at least equivalent to the net worth LICENSEE had as of the date of this Agreement and (ii) have available resources and sufficient scientific, business and other expertise comparable to LICENSEE in order to satisfy its obligations under this Agreement. At least sixty (60) days prior to termination of this Agreement, LICENSEE shall provide HARVARD with written notice of LICENSEE's nominee together with documentation sufficient to demonstrate the requirements set forth in subparagraphs (i) and (ii) above for HARVARD's approval, which shall not be unreasonably withheld. HARVARD shall notify LICENSEE in writing of its decision prior to termination of this Agreement. If HARVARD approves LICENSEE's nominee, LICENSEE shall assign this Agreement to its nominee and its nominee shall accept the assignment no later than thirty (30) days after the termination date of this Agreement.

In the event that HARVARD disapproved LICENSEE's first nominee, prior to the termination date of this Agreement, LICENSEE shall have the option to nominate one of its other sublicensees for HARVARD's approval which shall not be unreasonably withheld.

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9.4 LICENSEE may terminate this Agreement by giving ninety (90) days advance written notice of termination to HARVARD. Upon termination, LICENSEE shall submit a final Royalty Report to HARVARD and any royalty payments and unreimbursed patent expenses invoiced by HARVARD shall become immediately payable.

9.5 Sections 6.1, 6.2, 6.3, 7.1, 9.4, 9.5, 10.2, 10.3, 10.4, and 10.7 of this Agreement shall survive termination.

ARTICLE X
GENERAL

10.1 HARVARD does not warrant the validity of the PATENT RIGHTS licensed hereunder and make no representations whatsoever with regard to the scope of the licensed PATENT RIGHTS or that such PATENT RIGHTS may be exploited by LICENSEE, an AFFILIATE, or SUBLICENSEE without infringing other patents, provided, however, HARVARD represents that it has no knowledge of any facts or circumstances as of the execution date of this Agreement that would render any of the PATENT RIGHTS invalid or unenforceable. HARVARD represents and warrants, to the best of its knowledge, that HARVARD will own all right, title and interest in and to the PATENT RIGHTS.

10.2 HARVARD EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES AND MAKES NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF THE PATENT RIGHTS OR INFORMATION SUPPLIED BY HARVARD, LICENSED PROCESSES OR LICENSED PRODUCTS CONTEMPLATED BY THIS AGREEMENT.

10.3 (a) LICENSEE shall indemnify, defend and hold harmless HARVARD and its current or former directors, governing board members, trustees, officers, faculty, medical and professional staff, employees, students, and agents and their respective successors, heirs and assigns (collectively, the "INDEMNITEES"), from and against any claim, liability, cost, expense, damage, deficiency, loss or obligation of any kind or nature (including, without limitation, reasonable attorney's fees and other costs and expenses of litigation) (collectively, "Claims"), based upon, arising out of, or otherwise relating to this Agreement, including without limitation any cause of action relating to product liability concerning any product, process, or service made, used or sold pursuant to any right or license granted under this Agreement, provided, however, that such indemnification shall not apply to any liability, damage, loss, or expense to the extent directly attributable to the negligent activities, reckless misconduct or intentional misconduct of Indemnitees.

(b) Each Indemnitee that intends to claim indemnification under Section 10.3(a) shall promptly notify LICENSEE of any claim or action in respect of which the Indemnitee intends to claim such indemnification, and LICENSEE shall assume the defense thereof with counsel mutually satisfactory to LICENSEE and HARVARD. The failure to deliver notice to LICENSEE within a reasonable time after the commencement of any such claim or action, if materially prejudicial to its ability to

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defend such action, shall relieve LICENSEE of any liability to the Indemnitee under Section 10.3(a) with respect to such action, but the omission so to deliver notice to LICENSEE will not relieve it of any liability that it may have to any Indemnitee otherwise than under Section 10.3(a). HARVARD and any other Indemnitee, and their respective employees and agents, shall cooperate fully with LICENSEE and its legal representatives in the investigation of any claim or action covered by the indemnification under Section 10.3(a).

(c) Beginning at the time any such product, process or service is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by LICENSEE or by a SUBLICENSEE, AFFILIATE or agent of LICENSEE, LICENSEE shall, at its sole cost and expense, procure and maintain commercial general liability insurance in amounts not less than $2,000,000 per incident and $2,000,000 annual aggregate and naming the Indemnitees as additional insureds. During clinical trials of any such product, process or service, LICENSEE shall, at its sole cost and expense, procure and maintain commercial general liability insurance in such equal or lesser amount as HARVARD shall require, naming the Indemnitees as additional insureds. Such commercial general liability insurance shall provide: (i) product liability coverage; and (ii) broad form contractual liability coverage for LICENSEE's indemnification under this Agreement. If LICENSEE elects to self-insure all or part of the limits described above (including deductibles or retentions which are in excess of $250,000 annual aggregate) such self-insurance program must be acceptable to HARVARD and the Risk Management Foundation of the Harvard Medical Institutions, Inc. in their sole discretion. The minimum amounts of insurance coverage required shall not be construed to create a limit of LICENSEE's liability with respect to its indemnification under this Agreement.

(d) LICENSEE shall provide HARVARD with written evidence of such insurance upon request of HARVARD. LICENSEE shall provide HARVARD with written notice at least fifteen (15) days prior to the cancellation, non-renewal or material change in such insurance; if LICENSEE does not obtain replacement insurance providing comparable coverage within such fifteen (15) day period, HARVARD shall have the right to terminate this Agreement effective at the end of such fifteen (15) day period without notice or any additional waiting periods.

(e) LICENSEE shall maintain such commercial general liability insurance beyond the expiration or termination of this Agreement during: (i) the period that any product, process, or service, relating to, or developed pursuant to, this Agreement is being commercially distributed or sold by LICENSEE or by a SUBLICENSEE, AFFILIATE or agent of LICENSEE; and (ii) a reasonable period after the period referred to in Subsection (e)(i) above which in no event shall be less than fifteen (15) years.

10.4 LICENSEE shall not use HARVARD's name or insignia, or any adaptation of them, or the name of any of HARVARD's inventors in any advertising, promotional or sales literature without the prior written approval of HARVARD.

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10.5 Without the prior written approval of HARVARD in each instance, neither this Agreement nor the rights granted hereunder shall be transferred or assigned in whole or in part by LICENSEE to any person whether voluntarily or involuntarily, by operation of law or otherwise, except that each of LICENSEE and its AFFILIATES may assign this Agreement in connection with a merger, consolidation or sale or transfer of all or substantially all of its assets. This Agreement shall be binding upon the respective successors, legal representatives and assignees of HARVARD and LICENSEE.

10.6 The interpretation and application of the provisions of this Agreement shall be governed by the laws of the Commonwealth of Massachusetts.

10.7 LICENSEE shall comply with all applicable laws and regulations. In particular, it is understood and acknowledged that the transfer of certain commodities and technical data is subject to United States laws and regulations controlling the export of such commodities and technical data, including all Export Administration Regulations of the United States Department of Commerce. These laws and regulations among other things, prohibit or require a license for the export of certain types of technical data to certain specified countries. LICENSEE hereby agrees and gives written assurance that it will comply with all United States laws and regulations controlling the export of commodities and technical data, that it will be solely responsible for any violation of such by LICENSEE or its AFFILIATES or SUBLICENSEES, and that it will defend and hold HARVARD, CHILDREN, and MIT harmless in the event of any legal action of any nature occasioned by such violation.

10.8 LICENSEE agrees: (i) to obtain all regulatory approvals required for the manufacture and sale of LICENSED PRODUCTS and LICENSED PROCESSES; and (ii) to utilize appropriate patent marking on such LICENSED PRODUCTS. LICENSEE also agrees to register or record this Agreement as is required by law or regulation in any country where the license is in effect.

10.9 Any notices to be given hereunder shall be sufficient if signed by the party (or party's attorney) giving same and either: (i) delivered in person; (ii) mailed certified mail return receipt requested; or (iii) faxed to other party if the sender has evidence of successful transmission and if the sender promptly sends the original by ordinary mail, in any event to the following addresses:

If to LICENSEE:

Mycometrix Corporation
213 E. Grand Ave.
South San Francisco, CA 94080
Attention:
Fax: (650)-

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

If to HARVARD:

Office for Technology and Trademark Licensing

Harvard University
Holyoke Center, Suite 727
1350 Massachusetts Avenue
Cambridge, MA 02138
Fax: (617) 495-9568

By such notice either party may change their address for future notices.

Notices delivered in person shall be deemed given on the date delivered. Notices sent by fax shall be deemed given on the date faxed. Notices mailed shall be deemed given on the date postmarked on the envelope.

10.10 Should a court of competent jurisdiction later hold any provision of this Agreement to be invalid, illegal, or unenforceable, and such holding is not reversed on appeal, it shall be considered severed from this Agreement. All other provisions, rights and obligations shall continue without regard to the severed provision, provided that the remaining provisions of this Agreement are in accordance with the intention of the parties.

10.11 In the event of any controversy or claim arising out of or relating to any provision of this Agreement or the breach thereof, the parties shall try to settle such conflict amicably between themselves. Subject to the limitation stated in the final sentence of this Section 10.11, any such conflict which the parties are unable to resolve promptly shall be settled through arbitration conducted in accordance with the rules of the American Arbitration Association. The demand for arbitration shall be filed within a reasonable time after the controversy or claim has arisen, and in no event after the date upon which institution of legal proceedings based on such controversy or claim would be barred by the applicable statute of limitation. Such arbitration shall be held in Boston, Massachusetts. The award through arbitration shall be final and binding. Either party may enter any such award in a court having jurisdiction or may make application to such court for judicial acceptance of the award and an order of enforcement, as the case may be. Notwithstanding the foregoing, either party may, without recourse to arbitration, assert against the other party a third-party claim or cross-claim in any action brought by a third party, to which the subject matter of this Agreement may be relevant.

10.12 This Agreement constitutes the entire understanding between the parties and neither party shall be obligated by any condition or representation other than those expressly stated herein or as may be subsequently agreed to by the parties hereto in writing.

[The remainder of this page is intentionally blank.]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

PRESIDENT AND FELLOWS OF HARVARD COLLEGE	MYCOMETRIX CORPORATION
/s/ Joyce Brinton	/s/ Gajus Worthington
Joyce Brinton, Director Office for Technology and Trademark Licensing	President
12/7/00	12/18/00
Date	Date

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APPENDIX A

The following comprise PATENT RIGHTS:

[***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 10.8

4060.LICI.010 Harvard

CO-EXCLUSIVE LICENSE AGREEMENT

Between

President and Fellows of Harvard College

And

Mycometrix Corporation

Effective as of October 15, 2000

Re: Harvard Case #[***]

In consideration of the mutual promises and covenants set forth below, the parties hereto agree as follows:

ARTICLE I
DEFINITIONS

As used in this Agreement, the following terms shall have the following meanings:

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1.1 ACADEMIC RESEARCH PURPOSES: use of PATENT RIGHTS for academic research or other not-for-profit scholarly purposes which are undertaken at a non-profit or governmental institution that does not use the PATENT RIGHTS in the production or manufacture of products for sale or the performance of services for a fee.

1.2 AFFILIATE: any entity which controls, is controlled by, or is under common control with a party by ownership or control of at least fifty percent (50%) of the voting stock or other ownership. Unless otherwise specified, the term LICENSEE includes AFFILIATES.

1.3 FIELD : use of PATENT RIGHTS to develop, manufacture, use, offer for sale, sell, or import components and products in FIELD I and/or FIELD II:

FIELD I: [***]

FIELD II: [***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1.4 HARVARD: President and Fellows of Harvard College, a nonprofit Massachusetts educational corporation having offices at the Office for Technology and Trademark Licensing, Holyoke Center, Suite 727, 1350 Massachusetts Avenue, Cambridge, Massachusetts 02138.

1.5 LICENSED PROCESSES: the processes covered by at least one VALID CLAIM included within the PATENT RIGHTS.

1.6 LICENSED PRODUCTS: products covered by at least one VALID CLAIM included within the PATENT RIGHTS or products made or services provided in accordance with or by means of LICENSED PROCESSES.

1.7 LICENSEE: Mycometrix Corporation, a corporation organized under the laws of California having its principal offices at 213 East Grand Avenue, South San Francisco, CA 94080.

1.8 NET SERVICE INCOME: SERVICE INCOME less LICENSEE's actual direct and indirect cost for research, development and/or services provided.

1.9 NET SALES: the amount actually received for sales, leases, or other transfers of LICENSED PRODUCTS, less:

(i) customary trade, quantity or cash discounts and non-affiliated brokers' or agents' commissions actually allowed and taken;

(ii) amounts repaid or credited by reason of rejection or return;

(iii) to the extent separately stated on purchase orders, invoices, or other documents of sale, taxes levied on and/or other governmental charges made as to production, sale, transportation, delivery or use and paid by or on behalf of LICENSEE; and

(iv) reasonable charges for delivery or transportation provided by third parties and cost of insurance in transit, if separately stated.

NET SALES also includes the fair market value of any non-cash consideration received by LICENSEE for the sale, lease, or transfer of LICENSED PRODUCTS.

If a LICENSED PRODUCT is sold as a combination product containing the LICENSED PRODUCT and one or more other components, NET SALES shall be calculated by multiplying the gross amount invoiced for the sale of the combination product by the fraction A/A+B where A is the average gross selling price of the LICENSED PRODUCT sold separately by LICENSEE and B is the average gross selling price of such other components of the combination products sold separately by LICENSEE during the relevant royalty payment period.

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In the event that LICENSEE grants a sublicensee hereunder, and receives payments based upon SUBLICENSEE's sales of LICENSED PRODUCTS, LICENSEE may upon approval from HARVARD (which shall not be unreasonably withheld) modify the definition of NET SALES for the purposes of calculating royalties payable to HARVARD on such SUBLICENSEE's sales to be the same as the definition of NET SALES on which such royalties to LICENSEE are calculated.

1.10 SERVICE INCOME: the total financial consideration received by LICENSEE for commercial services performed on a fee-for-service basis using the LICENSED PRODUCTS or LICENSED PROCESSES by LICENSEE under a contract with a third party, where such services are based primarily on the use of fully functional LICENSED PRODUCTS or LICENSED PROCESSES (as applicable) for their intended commercial use (such as, for example, where LICENSEE performs commercial-scale genotyping services for a pharmaceutical company on a fee-for-service basis using fully developed microfluidics chips comprising LICENSED PRODUCTS). SERVICE INCOME shall not include amounts received in connection with research and/or development of LICENSED PRODUCTS or LICENSED PROCESSES themselves.

1.11 PATENT RIGHTS: The applications and patents as listed in Appendix A of this Agreement, the allowed claims of such applications, the inventions described and claimed therein, and any divisions or continuations of the applications and patents as listed in Appendix A, and specific claims of any continuations-in-part of such applications to the extent the specific claims are directed to subject matter described in the applications and patents listed in Appendix A in a manner sufficient to support such specific claims under 35 U.S.C., patents issuing thereon or reissues thereof, and any and all foreign patents and patent applications corresponding thereto, all to the extent owned or controlled by HARVARD.

1.12 SUBLICENSE INCOME: the amount paid to LICENSEE by a third party (other than an AFFILIATE of LICENSEE) (a) for the sublicening of PATENT RIGHTS to a third party as well as (b) for the related licensing of LICENSEE's own patent rights or know-how or LICENSEE's in-licensed non-HARVARD technologies, including but not limited to (i) license fees, (ii) milestone payments, (iii) royalties, (iv) the fair market value in cash of any non-cash consideration for such sublicense, and (v) in the event that LICENSEE receives any payment for equity in consideration for the grant of sublicense rights that included a premium over the fair market value of such equity, the amount of such premium. LICENSEE shall be responsible for determining such fair market value with reasonable business judgment.

1.13 SUBLICENSEE: any non-AFFILIATE granted a sublicense of any of the rights HARVARD has granted to LICENSEE under Section 3.1.

1.14 TERRITORY: Worldwide.

1.15 VALID CLAIM: either (i) a claim of an issued patent that has not been held unenforceable or invalid by an agency or a court of competent jurisdiction in any

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unappealable or unappealed decision or (ii) a claim of a published, pending patent application, which claim is substantially identical to a corresponding claim in a subsequently issued patent having priority to the patent application.

1.16 The terms “Public Law 96-517” and “Public Law 98-620” include all amendments to those statutes.

1.17 The terms “sold” and “sell” include, without limitation, leases and other transfers and similar transactions.

ARTICLE II
REPRESENTATIONS

2.1 HARVARD is owner by assignment from [***], in the foreign patent applications corresponding thereto, and in the inventions described and claimed therein.

2.2 HARVARD has authority to issue licenses under PATENT RIGHTS.

2.3 HARVARD is committed to the policy that ideas or creative works produced at HARVARD should be used for the greatest possible public benefit, and believes that every reasonable incentive should be provided for the prompt introduction of such ideas into public use, all in a manner consistent with the public interest.

2.4 LICENSEE is prepared and intends to diligently develop the invention and to bring products to market which are subject to this Agreement, specifically including one or more products in the FIELD selected from a [***].

2.5 LICENSEE is desirous of obtaining a co-exclusive license in the FIELD and in the TERRITORY in order to practice the PATENT RIGHTS in the United States and in certain foreign countries, and to manufacture, use and sell in the commercial market the products made in accordance therewith, and HARVARD is desirous of granting such a license to LICENSEE in accordance with the terms of this Agreement.

ARTICLE III
GRANT OF RIGHTS

3.1 HARVARD hereby grants to LICENSEE and LICENSEE accepts, subject to the terms and conditions hereof, in the TERRITORY a co-exclusive commercial license under PATENT RIGHTS in FIELD I and in FIELD II to make and have made, to use and have used, to sell

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and have sold, and to offer for sale and have offered for sale the LICENSED PRODUCTS, and to practice the LICENSED PROCESSES, for the life of the PATENT RIGHTS. HARVARD will grant no more than two commercial licenses in FIELD I at any time and will grant no more than two commercial licenses in FIELD II at any time and HARVARD will not grant other licenses in the FIELD except as required by HARVARD's obligations in Section 3.2(a) or as permitted Section 3.2(b). Such co-exclusive license shall include the right to grant sublicenses under the following circumstances: (i) LICENSEE can demonstrate that it has added significant value to the PATENT RIGHTS to be sublicensed, and that such a sublicense also contains a substantial and essentially simultaneous license of LICENSEE owned intellectual property, or (ii) LICENSEE grants a sublicense under other HARVARD patent rights licensed exclusively to LICENSEE which are dominated by PATENT RIGHTS, and such sublicense under PATENT RIGHTS is necessary to practice such other HARVARD patent rights.

3.2 The granting and exercise of this license is subject to the following conditions:

(a) HARVARD's "Statement of Policy in Regard to Inventions, Patents and Copyrights," dated August 10, 1998, Public Law 96-517, Public Law 98-620. In addition, this Agreement is subject to HARVARD's obligations under agreements with other sponsors of research, provided that such obligations are not in conflict with the rights granted hereunder. Any right granted in this Agreement greater than that permitted under Public Law 96-517, or Public Law 98-620, shall be subject to modification as may be required to conform to the provisions of those statutes.

(b) HARVARD reserves the right to make and use, and grant to others non-exclusive licenses to make and use solely for ACADEMIC RESEARCH PURPOSES the subject matter described and claimed in PATENT RIGHTS.

(c) LICENSEE shall use commercially reasonable efforts to effect introduction of the LICENSED PRODUCTS into the commercial market as soon as practicable, consistent with sound and reasonable business practice and judgment; thereafter, until the expiration of this Agreement, LICENSEE shall endeavor to keep LICENSED PRODUCTS reasonably available to the public.

(d) At any time after three years from the effective date of this Agreement and as HARVARD's sole remedy for such non-performance, HARVARD may increase the license maintenance royalty under Section 4.4 to [***] dollars each in FIELD I and in FIELD II in year 2004 and [***] dollars each in FIELD I and in FIELD II per year each year beginning in 2005, if in HARVARD's reasonable judgment, the Progress Reports furnished by LICENSEE do not demonstrate that LICENSEE has satisfied at least one of the following conditions, which non-performance is not cured within ninety (90) days following the written notification of such by HARVARD to LICENSEE:

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(i) has put the licensed subject matter into commercial use in at least one of the countries hereby licensed, directly or through a sublicense, and is keeping the licensed subject matter reasonably available to the public; or

(ii) is engaged in research, development, manufacturing, marketing or sublicensing activity appropriate to achieving 3.2(d)(i).

(e) In all sublicenses granted by LICENSEE hereunder, LICENSEE shall include a requirement that the SUBLICENSEE use commercially reasonable efforts to bring the subject matter of the sublicense into commercial use. LICENSEE shall further provide in such sublicenses that such sublicenses are subject and subordinate to the terms and conditions of this Agreement, except: (i) the SUBLICENSEE may not further sublicense; and (ii) the rate of royalty on NET SALES paid by the SUBLICENSEE to the LICENSEE. Copies of the relevant provisions of all sublicense agreements shall be provided promptly to HARVARD. HARVARD agrees to maintain any information contained in such provisions in confidence, except as otherwise required by law, however, HARVARD may include in its usual reports annual amounts of royalties paid.

(f) A license in any other field of use in addition to the FIELD shall be the subject of a separate agreement and shall require LICENSEE's submission of evidence, satisfactory to HARVARD, demonstrating LICENSEE's willingness and ability to develop and commercialize in such other field of use the kinds of products or processes likely to be encompassed in such other fields.

(g) To the extent that federal funds are used to support research leading to a patent or patent application in the PATENT RIGHTS, LICENSEE shall cause any LICENSED PRODUCT produced for sale by LICENSEE or SUBLICENSEES in the United States to be manufactured substantially in the United States during the period of exclusivity of this license in the United States.

3.4 All rights reserved to the United States Government and others under Public Law 96-517, and Public Law 98-620, shall remain and shall in no way be affected by this Agreement.

ARTICLE IV
ROYALTIES

4.1 LICENSEE shall pay to HARVARD a non-refundable license royalty fee in the sum of [***] payable within thirty (30) days of the execution date of this Agreement.

4.2 (a) In consideration of the right and license granted herein, LICENSEE shall pay to HARVARD during the term of this Agreement a royalty of [***] on NET SALES of LICENSED PRODUCTS sold by LICENSEE.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(b) In the event that a single LICENSED PRODUCT or LICENSED PROCESS is covered by HARVARD intellectual property in addition to PATENT RIGHTS, which is licensed to LICENSEE under other agreements as of the date of this Agreement, then the total royalty payment due HARVARD under all such agreements including this Agreement shall be [***] of NET SALES. LICENSEE shall notify HARVARD of the identity of each license agreement that includes patent rights covering the product or process, and HARVARD shall distribute the royalties evenly among such agreements.

(c) As consideration for the rights granted hereunder, LICENSEE shall pay to HARVARD during the term of this Agreement a royalty in the form of stock of LICENSEE as follows:

(i) LICENSEE shall issue to HARVARD [***] shares of the Common Stock of LICENSEE ("Shares") pursuant to the terms of a mutually acceptable Stock Subscription Agreement, provided, however, that HARVARD shall be subject to and enter into appropriate agreements and related documents as required of other stockholders of LICENSEE.

(ii) HARVARD represents and warrants to LICENSEE that:

(1) HARVARD is acquiring the Shares for its own account for investment and not with a view to, or for sale in connection with any distribution thereof, nor with any present intention of distributing or selling the same; and HARVARD has no present or contemplated agreement, undertaking, arrangement, obligation, indebtedness or commitment providing for the disposition thereof.

(2) HARVARD has full power and authority to enter into and to perform this Agreement in accordance with its terms.

(3) HARVARD has sufficient knowledge and experience in investing in companies similar to LICENSEE so as to be able to evaluate the risks and merits of its investment in LICENSEE and is able financially to bear the risks thereof.

(iii) Each certificate representing the Shares shall bear a legend substantially in the following form:

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"The shares represented by this certificate have not been registered under the Securities Act of 1933 or any state securities law and they may not be sold or otherwise transferred by any person, including a pledgee, unless (1) either (a) a registration statement with respect to such shares shall be effective under the Securities Act of 1933, as amended, or (b) the Corporation shall have received an opinion of counsel satisfactory to the Corporation that an exemption from registration under such Act is then available, and (2) there shall have been compliance with all applicable securities laws."

"The shares represented by this certificate are subject to a mutually agree-upon Stock Purchase and Right of First Refusal Agreement with this Corporation, a copy of which Stock Purchase and Right of First Refusal Agreement is available for inspection at the offices of the Corporation or may be made available upon request."

The foregoing legend shall be removed from the certificates representing any Shares, at the request of the holder thereof, at such time as they become eligible for resale pursuant to the Securities Act of 1933, as amended.

If at any time prior to the time the Shares are eligible for resale pursuant to an exemption from registration under the Securities Act of 1933, as amended, LICENSEE proposes to register any of its Common Stock, under the Securities Act of 1933, except at LICENSEE's initial public offering or any offering pursuant to Forms S-4 or S-8, LICENSEE shall offer HARVARD the opportunity to have its Shares registered under the registration statement to be filed at such time. HARVARD will be offered the right to register its Shares under the same terms, conditions and restrictions as other shareholders with piggyback registration rights and the inclusion of any Shares in such registration statement shall be subject to the approval of the underwriters of such offering

(iv) HARVARD's ownership rights to Shares shall not be affected should the license pursuant to this Agreement be converted to a nonexclusive one.

(d) In the case of sublicenses, LICENSEE shall also pay to HARVARD a royalty of [***] of SUBLICENSE INCOME. If compensation for such a sublicense of PATENT RIGHTS is bundled with compensation received for the sublicensing of the other HARVARD patent rights licensed to LICENSEE under other agreements as of the date of this Agreement, LICENSEE shall pay HARVARD only [***] of the total compensation received no matter how many license agreements from HARVARD are involved. In such a case, LICENSEE shall notify HARVARD of the identity of each license agreement involved and HARVARD shall distribute its [***] of

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compensation equally among those license agreements, including this Agreement.

(e) LICENSEE shall pay HARVARD [***] of NET SERVICE INCOME. If SERVICE INCOME is bundled with service income under another license to LICENSEE as of the date of this Agreement, LICENSEE shall pay a royalty of [***] of NET SERVICE INCOME received from each and every third party ("Third Party") to which services are provided. LICENSEE shall notify HARVARD of the identity of each license agreement involved in the services and HARVARD shall distribute its [***] of compensation equally among those license agreements, including this Agreement.

(f) If other co-exclusive licenses in the same FIELD and TERRITORY are granted after the date this Agreement is executed, the above financial compensation shall not exceed the financial compensation to be paid by other licensees in the same FIELD and TERRITORY during the term of the co-exclusive license provided LICENSEE accepts any less favorable terms included in such other license.

If stock is part of the financial compensation to be paid by other licensees in the same FIELD and TERITORY, the fair market value of the stock shall be the same as the price per share which other investors paid in the last round of financing unless the stock is publicly traded.

4.3 On sales between LICENSEE and its AFFILIATES for resale or incorporation into products, the royalty shall be paid on the NET SALES of the AFFILIATE. On sales between LICENSEE and sublicensees for resale, the royalty shall be paid on the SUBLICENSE INCOME.

4.4 No later than January 1 of each calendar year indicated below, LICENSEE shall pay to HARVARD the following non-refundable license maintenance royalty and/or advance on royalties. Such payments shall be credited against running royalties due for that calendar year and Royalty Reports shall reflect such a credit. Such payments shall not be credited against milestone payments (if any) nor against royalties due for any subsequent calendar year nor against such payments due under any other agreements with HARVARD.

	FIELD I	FIELD II
January 1, 2002	[***]	[***]
January 1, 2003	[***]	[***]
January 1, 2004	[***]	[***]
each year thereafter	[***]	[***]

ARTICLE V
REPORTING

5.1 Prior to signing this Agreement, LICENSEE has provided to HARVARD a written business plan under which LICENSEE intends to bring the subject matter of the licenses

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granted hereunder into commercial use upon execution of this Agreement. Such plan includes proposed marketing efforts.

5.2 No later than sixty (60) days after June 30 of each calendar year, LICENSEE shall provide to HARVARD a written annual Progress Report describing progress on research and development, regulatory approvals, manufacturing, sublicensing, marketing and sales during the most recent twelve (12) month period ending June 30 and plans for the forthcoming year. If multiple technologies are covered by the license granted hereunder, the Progress Report shall provide the information set forth above for each technology. If progress differs from that anticipated in the plan required under Section 5.1, LICENSEE shall explain the reasons for the difference and propose a modified plan for HARVARD's review. LICENSEE shall also provide any reasonable additional data HARVARD requires to evaluate LICENSEE's performance.

5.3 LICENSEE shall report to HARVARD the date of first sale of LICENSED PRODUCTS (or results of LICENSED PROCESSES) in each country within thirty (30) days of occurrence.

5.4 (a) LICENSEE shall submit to HARVARD within sixty (60) days after each calendar half year ending June 30 and December 31, a Royalty Report setting forth for such half year at least the following information:

(i) the number of LICENSED PRODUCTS sold by LICENSEE in each country;

(ii) total billings and amounts actually received for such LICENSED PRODUCTS;

(iii) an accounting for all LICENSED PROCESSES used or sold;

(iv) deductions applicable to determine the NET SALES thereof;

(v) the amount of SERVICE INCOME received by LICENSEE and an accounting of all deductions to yield NET SERVICE INCOME;

(vi) the amount of SUBLICENSE INCOME received by LICENSEE; and

(vii) the amount of royalty due thereon, or, if no royalties are due to HARVARD for any reporting period, the statement that no royalties are due.

Such report shall be certified as correct by an officer of LICENSEE and shall include a detailed listing of all deductions from royalties.

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(b) LICENSEE shall pay to HARVARD with each such Royalty Report the amount of royalty due with respect to such half year. If multiple technologies are covered by the license granted hereunder, LICENSEE shall specify which PATENT RIGHTS are utilized for each LICENSED PRODUCT and LICENSED PROCESS included in the Royalty Report.

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(c) All payments due hereunder shall be deemed received when funds are credited to HARVARD's bank account and shall be payable by check or wire transfer in United States dollars. Conversion of foreign currency to U.S. dollars shall be made at the conversion rate existing in the United States (as reported in the New York Times or the Wall Street Journal) on the last working day of each royalty period. No transfer, exchange, collection or other charges shall be deducted from such payments.

(d) All such reports shall be maintained in confidence by HARVARD except as required by law; however, HARVARD may include in its usual reports annual amounts of royalties paid.

(e) Late payments shall be subject to a charge of one and one-half percent (1.5%) per month, or $250, whichever is greater.

5.5 In the event of acquisition, merger, change of corporate name or change in make-up, organization, or identity, LICENSEE shall notify HARVARD in writing within thirty (30) days of such event.

5.6 If by law, regulation or fiscal policy of a particular country, conversion into United States dollars or transfer of funds of a convertible currency to the United States is restricted or forbidden, LICENSEE shall give HARVARD prompt notice in writing and shall pay the royalty and other amounts due through such means or methods as are lawful in such country as HARVARD may reasonably designate. Failing the designation by HARVARD of such lawful means or methods within thirty (30) days after such notice is given to HARVARD, LICENSEE shall deposit such royalty or other payment in local currency to the credit of HARVARD in a recognized banking institution designated by HARVARD, or if none is designated by HARVARD within the thirty (30) day period described above, in a recognized banking institution selected by LICENSEE and identified in a written notice to HARVARD by LICENSEE, and such deposit shall fulfill all obligations of LICENSEE to HARVARD with respect to such royalties. When in any country in which the law or regulations prohibit both the transmittal and deposit of royalties on sales in such country, royalty payments shall be suspended for as long as such prohibition is in effect, and as soon as such prohibition ceases to be in effect, all royalties which LICENSEE would have been under obligation to transmit or deposit, but for the prohibition, shall be deposited or transmitted promptly to the extent allowable.

ARTICLE VI
RECORD KEEPING

6.1 LICENSEE shall keep, and shall require its SUBLICENSEES to keep, accurate records (together with supporting documentation) of LICENSED PRODUCTS made, used or sold under this Agreement, and SERVICE INCOME and SUBLICENSE INCOME received by LICENSEE under this Agreement, appropriate to determine the amount of royalties due to HARVARD hereunder. Such records shall be retained for three (3) years following the end of the reporting period to which they relate. For such three year period, they shall be

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

available during normal business hours upon reasonable advance notice for examination by a certified public accountant selected by HARVARD, and reasonably acceptable to LICENSEE, for the sole purpose of verifying reports and payments hereunder. In conducting examinations pursuant to this Section 6.1, HARVARD's accountant shall have access to all records which HARVARD reasonably believes to be relevant to the calculation of royalties under Article IV. HARVARD agrees to maintain any information contained in such records in confidence, except as otherwise required by law and except information in regarding the amount of royalties due.

6.2 HARVARD's accountant shall not disclose to HARVARD any information other than information relating to the accuracy of reports and payments made hereunder.

6.3 Such examination by HARVARD's accountant shall be at HARVARD's expense, except that if such examination shows an underreporting or underpayment in excess of five percent (5%) for any twelve (12) month period, then LICENSEE shall pay the cost of such examination as well as any additional sum that would have been payable to HARVARD had the LICENSEE reported correctly, plus interest on said sum at the rate of one and one-half percent (1.5%) per month.

ARTICLE VII
DOMESTIC AND FOREIGN PATENT FILING AND MAINTENANCE

7.1 Upon execution of this Agreement, LICENSEE shall reimburse HARVARD for fifty percent (50%) of all reasonable expenses HARVARD has incurred for the preparation, filing, prosecution, maintenance and counseling with respect to PATENT RIGHTS. Such expenses total [***] as of October 1, 2000. Thereafter, LICENSEE shall reimburse HARVARD for fifty percent (50%) of all such future reasonable expenses prior to the termination of this Agreement upon receipt of invoices from HARVARD.

7.2 HARVARD shall be responsible for the preparation, filing, prosecution and maintenance of any and all patent applications and patents included in PATENT RIGHTS. HARVARD will instruct counsel to directly notify HARVARD and LICENSEE and provide them copies of any official communications from the United States and foreign patent offices relating to said prosecution, and to provide LICENSEE with advance draft copies of all relevant communications to the various patent offices, so that LICENSEE may be informed and apprised of the continuing prosecution of patent applications in PATENT RIGHTS. LICENSEE shall have reasonable opportunities to participate in decision making on all key decisions affecting filing, prosecution and maintenance of patents and patent applications in PATENT RIGHTS. HARVARD will use reasonable efforts to incorporate LICENSEE's reasonable suggestions regarding said prosecution. HARVARD shall use all reasonable efforts to amend any patent application to include claims reasonably requested by LICENSEE to protect LICENSED PRODUCTS.

7.3 HARVARD and LICENSEE shall cooperate fully in the preparation, filing, prosecution and maintenance of PATENT RIGHTS and of all patents and patent applications licensed to LICENSEE hereunder, executing all papers and instruments or requiring members of

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HARVARD to execute such papers and instruments so as to enable HARVARD to apply for, to prosecute and to maintain patent applications and patents in HARVARD's name in any country. Each party shall provide to the other prompt notice as to all matters which come to its attention and which may affect the preparation, filing, prosecution or maintenance of any such patent applications or patents.

7.4 LICENSEE may elect to surrender its PATENT RIGHTS in any country upon sixty (60) days written notice to HARVARD. Such notice shall not relieve LICENSEE from responsibility to reimburse HARVARD for patent-related expenses incurred prior to the expiration of the (60) day notice period.

7.5 If HARVARD elects not to prosecute or maintain any of the patents or patent applications relating to PATENT RIGHTS or any portion thereof in any country, LICENSEE shall be given sufficient notice of HARVARD's decision so that LICENSEE may request that HARVARD continue prosecuting or maintaining such patents or patent applications, at LICENSEE's expense. If HARVARD elects not to prosecute or maintain such patents or patent applications after such request by LICENSEE, then LICENSEE shall have the right, but not the obligation, at its own expense to prosecute and maintain such patents and patent applications or portion thereof in such country and in HARVARD's name. If LICENSEE assumes 100% of the costs to file, prosecute, and maintain certain patents and patent applications relating to the PATENT RIGHTS pursuant to this Section 7.5, and, if HARVARD licenses the PATENT RIGHTS to one or more co-exclusive licensees designated in Section 3.1 after such time, then HARVARD will credit LICENSEE with the costs LICENSEE has paid in excess of 50% if one other licensee, due for the preparation, filing, prosecution and maintenance of patents and patent applications relating to PATENT RIGHTS pursuant to Section 7.1 above.

7.6 If LICENSEE can demonstrate that it is not being adequately informed or apprised of the continuing prosecution of patents or patent applications in PATENT RIGHTS, or that it is not being provided with reasonable opportunities to participate in decision making or that its interests are not being adequately protected, LICENSEE shall be entitled to engage, at LICENSEE's expense, independent patent counsel to review and evaluate patent prosecution and filing of patents and patent applications included in PATENT RIGHTS.

ARTICLE VIII
INFRINGEMENT

8.1 With respect to any PATENT RIGHTS that are licensed to LICENSEE pursuant to this Agreement, LICENSEE shall have the right to prosecute in its own name and at its own expense any infringement of such patent. HARVARD agrees to notify LICENSEE promptly of each infringement of such patents of which HARVARD, as applicable, is or becomes aware. Before LICENSEE commences an action with respect to any infringement of such patents, LICENSEE shall give careful consideration to the views of HARVARD and to potential effects on the public interest in making its decision whether or not to sue.

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8.2 LICENSEE acknowledges that other co-exclusive licensees of PATENT RIGHTS designated in Section 3.1 shall have rights identical to LICENSEE to prosecute infringers and that co-exclusive licensees will be bound by the identical terms of this Section 8.2. In any prosecution instigated by LICENSEE and in which HARVARD, as necessary, is also named plaintiff as owner of the PATENT RIGHTS, LICENSEE must notify other co-exclusive licensees of the existence of such legal action and allow other co-exclusive licensees to join as a plaintiff upon co-exclusive licensees' request. In addition, in the event other co-exclusive licensees instigate an infringement prosecution, LICENSEE hereby consents to being joined as a plaintiff in such suit solely for the purpose of procuring standing to bring the action and at the sole expense of the instigating co-exclusive licensee. To the extent that LICENSEE desires to participate in any strategic decisions affecting the prosecution of the action brought by other co-exclusive licensees, LICENSEE acknowledges that it and co-exclusive licensees will necessarily have to reach a mutual agreement concerning litigation expenses and strategy. In no event shall HARVARD incur any liability or expense in connection with any action of co-exclusive licensees, joint or otherwise.

During any such litigation, HARVARD will agree to not license any defendant or accused infringer of the PATENT RIGHTS in the litigation, without LICENSEE's prior written consent.

8.3 (a) If LICENSEE elects to commence an action as described above, HARVARD may, to the extent permitted by law, elect to join as parties in that action. Regardless of whether HARVARD elects to join as parties, HARVARD shall cooperate fully with LICENSEE in connection with any such action.

(b) HARVARD agrees to join as a party in any action if required by law to do so in order to bring an action under the PATENT RIGHTS.

(c) LICENSEE shall reimburse HARVARD for any costs incurs with LICENSEE's approval, including reasonable attorneys' fees, as part of an action brought by LICENSEE, irrespective of whether HARVARD becomes a co-plaintiff.

8.4 If LICENSEE elects to commence an action as described above, LICENSEE may deduct from its royalty payments to HARVARD with respect to the patent(s) subject to suit an amount not exceeding fifty percent (50%) of LICENSEE's expenses and costs of such action, including reasonable attorneys' fees; provided, however, that such reduction shall not exceed fifty percent (50%) of the total royalty due to HARVARD with respect to the patent(s) subject to suit for each calendar year. If such fifty percent (50%) of LICENSEE's expenses and costs exceeds the amount of royalties deducted by LICENSEE for any calendar year, LICENSEE may to that extent reduce the royalties due to HARVARD from LICENSEE in succeeding calendar years, but never by more than fifty percent (50%) of the total royalty due in any one year with respect to the patent(s) subject to suit.

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8.5 No settlement, consent judgment or other voluntary final disposition of the suit may be entered into without the prior written consent of HARVARD which consent shall not be unreasonably withheld.

8.6 Recoveries or reimbursements from actions commenced by LICENSEE pursuant to this Article shall first be applied to reimburse LICENSEE, HARVARD for litigation costs not paid from royalties and then to reimburse HARVARD for royalties deducted by LICENSEE pursuant to Section 8.4. Any remaining recoveries or reimbursements shall be shared as follows:

(a) If the amount is lost profits or lost royalties, LICENSEE shall receive an amount equal to the damages the court determines LICENSEE has suffered as a result of the infringement less the amount of any royalties that would have been due HARVARD on sales of LICENSED PRODUCTS lost by LICENSEE as a result of the infringement had LICENSEE made such sales, and HARVARD shall receive an amount equal to the royalties it would have received if such sales had been made by LICENSEE, and

(b) As to awards other than lost profits or lost royalties, fifty percent (50%) to LICENSEE and fifty percent (50%) to HARVARD.

(c) If two or more co-exclusive licensees undertake the suit, the provision of this Section 8.6 will be modified to take into account each co-exclusive licensee's expenses and lost profits.

8.7 If LICENSEE elects not to exercise its right to prosecute an infringement of the PATENT RIGHTS pursuant to this Article, HARVARD may do so at its own expense, controlling such action and retaining all recoveries therefrom. LICENSEE shall cooperate fully with HARVARD in connection with any such action.

8.8 If a declaratory judgment action is brought naming LICENSEE as a defendant and alleging invalidity of any of the PATENT RIGHTS, HARVARD may elect to take over the sole defense of the action at its own expense. LICENSEE shall cooperate fully with HARVARD in connection with any such action. HARVARD shall consult with LICENSEE regarding such defense.

ARTICLE IX
TERMINATION OF AGREEMENT

9.1 This Agreement, unless terminated as provided herein, shall remain in effect until the last patent or patent application in PATENT RIGHTS has expired or been abandoned.

9.2 HARVARD may terminate this Agreement as follows:

(a) If LICENSEE does not make a payment due hereunder and fails to cure such non-payment (including the payment of interest in accordance with Section 5.4(e)) within

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thirty (30) days after the date of notice in writing of such non-payment by HARVARD.

(b) If LICENSEE defaults in its obligations under Sections 10.3(c) and 10.3(d) to procure and maintain insurance.

(c) If LICENSEE shall become insolvent, shall make an assignment for the benefit of creditors, or shall have a petition in bankruptcy filed for or against it. Such termination shall be effective immediately upon HARVARD giving written notice to LICENSEE.

(d) If an examination by HARVARD's accountant pursuant to Article V shows an underreporting or underpayment by LICENSEE in excess of twenty percent (20%) for any twelve (12) month period, provided that such underreporting or underpayment is not determined to be inadvertent or the result of an honest mistake.

(e) If LICENSEE is convicted of a felony relating to the manufacture, use, or sale of LICENSED PRODUCTS.

(f) Except as provided in Subsections (a), (b), and (c) above, if LICENSEE defaults in the performance of any material obligations under this Agreement and the default has not been remedied within forty-five (45) days after the date of notice in writing of such default by HARVARD.

9.3 LICENSEE shall provide, in all sublicenses granted by it under this Agreement, that LICENSEE's interest in such sublicenses shall at HARVARD's option terminate or be assigned to HARVARD upon termination of this Agreement; however, LICENSEE shall have the option to nominate one of its sublicensees as a substitute for LICENSEE. The proposed substitute must (i) have a net worth of at least equivalent to the net worth LICENSEE had as of the date of this Agreement and (ii) have available resources and sufficient scientific, business and other expertise comparable to LICENSEE in order to satisfy its obligations under this Agreement. At least sixty (60) days prior to termination of this Agreement, LICENSEE shall provide HARVARD with written notice of LICENSEE's nominee together with documentation sufficient to demonstrate the requirements set forth in subparagraphs (i) and (ii) above for HARVARD's approval, which shall not be unreasonably withheld. HARVARD shall notify LICENSEE in writing of its decision prior to termination of this Agreement. If HARVARD approves LICENSEE's nominee, LICENSEE shall assign this Agreement to its nominee and its nominee shall accept the assignment no later than thirty (30) days after the termination date of this Agreement.

In the event that HARVARD disapproved LICENSEE's first nominee, prior to the termination date of this Agreement, LICENSEE shall have the option to nominate one of its other sublicensees for HARVARD's approval which shall not be unreasonably withheld.

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9.4 LICENSEE may terminate this Agreement by giving ninety (90) days advance written notice of termination to HARVARD. Upon termination, LICENSEE shall submit a final Royalty Report to HARVARD and any royalty payments and unreimbursed patent expenses invoiced by HARVARD shall become immediately payable.

9.5 Sections 6.1, 6.2, 6.3, 7.1, 9.4, 9.5, 10.2, 10.3, 10.4, and 10.7 of this Agreement shall survive termination.

ARTICLE X
GENERAL

10.1 HARVARD does not warrant the validity of the PATENT RIGHTS licensed hereunder and make no representations whatsoever with regard to the scope of the licensed PATENT RIGHTS or that such PATENT RIGHTS may be exploited by LICENSEE, an AFFILIATE, or SUBLICENSEE without infringing other patents, provided, however, HARVARD represents that it has no knowledge of any facts or circumstances as of the execution date of this Agreement that would render any of the PATENT RIGHTS invalid or unenforceable. HARVARD represents and warrants, to the best of its knowledge, that HARVARD owns all right, title and interest in and to the PATENT RIGHTS.

10.2 HARVARD EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES AND MAKES NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF THE PATENT RIGHTS OR INFORMATION SUPPLIED BY HARVARD, LICENSED PROCESSES OR LICENSED PRODUCTS CONTEMPLATED BY THIS AGREEMENT.

10.3 (a) LICENSEE shall indemnify, defend and hold harmless HARVARD and its current or former directors, governing board members, trustees, officers, faculty, medical and professional staff, employees, students, and agents and their respective successors, heirs and assigns (collectively, the “INDEMNITEES”), from and against any claim, liability, cost, expense, damage, deficiency, loss or obligation of any kind or nature (including, without limitation, reasonable attorney’s fees and other costs and expenses of litigation) (collectively, “Claims”), based upon, arising out of, or otherwise relating to this Agreement, including without limitation any cause of action relating to product liability concerning any product, process, or service made, used or sold pursuant to any right or license granted under this Agreement, provided, however, that such indemnification shall not apply to any liability, damage, loss, or expense to the extent directly attributable to the negligent activities, reckless misconduct or intentional misconduct of Indemnitees.

(b) Each Indemnitee that intends to claim indemnification under Section 10.3(a) shall promptly notify LICENSEE of any claim or action in respect of which the Indemnitee intends to claim such indemnification, and LICENSEE shall assume the defense thereof with counsel mutually satisfactory to LICENSEE and HARVARD. The failure to deliver notice to LICENSEE within a reasonable time after the

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commencement of any such claim or action, if materially prejudicial to its ability to defend such action, shall relieve LICENSEE of any liability to the Indemnitee under Section 10.3(a) with respect to such action, but the omission so to deliver notice to LICENSEE will not relieve it of any liability that it may have to any Indemnitee otherwise than under Section 10.3(a). HARVARD and any other Indemnitee, and their respective employees and agents, shall cooperate fully with LICENSEE and its legal representatives in the investigation of any claim or action covered by the indemnification under Section 10.3(a).

(c) Beginning at the time any such product, process or service is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by LICENSEE or by a SUBLICENSEE, AFFILIATE or agent of LICENSEE, LICENSEE shall, at its sole cost and expense, procure and maintain commercial general liability insurance in amounts not less than $2,000,000 per incident and $2,000,000 annual aggregate and naming the Indemnitees as additional insureds. During clinical trials of any such product, process or service, LICENSEE shall, at its sole cost and expense, procure and maintain commercial general liability insurance in such equal or lesser amount as HARVARD shall require, naming the Indemnitees as additional insureds. Such commercial general liability insurance shall provide: (i) product liability coverage; and (ii) broad form contractual liability coverage for LICENSEE's indemnification under this Agreement. If LICENSEE elects to self-insure all or part of the limits described above (including deductibles or retentions which are in excess of $250,000 annual aggregate) such self-insurance program must be acceptable to HARVARD and the Risk Management Foundation of the Harvard Medical Institutions, Inc. in their sole discretion. The minimum amounts of insurance coverage required shall not be construed to create a limit of LICENSEE's liability with respect to its indemnification under this Agreement.

(d) LICENSEE shall provide HARVARD with written evidence of such insurance upon request of HARVARD. LICENSEE shall provide HARVARD with written notice at least fifteen (15) days prior to the cancellation, non-renewal or material change in such insurance; if LICENSEE does not obtain replacement insurance providing comparable coverage within such fifteen (15) day period, HARVARD shall have the right to terminate this Agreement effective at the end of such fifteen (15) day period without notice or any additional waiting periods.

(e) LICENSEE shall maintain such commercial general liability insurance beyond the expiration or termination of this Agreement during: (i) the period that any product, process, or service, relating to, or developed pursuant to, this Agreement is being commercially distributed or sold by LICENSEE or by a SUBLICENSEE, AFFILIATE or agent of LICENSEE; and (ii) a reasonable period after the period referred to in Subsection (e)(i) above which in no event shall be less than fifteen (15) years.

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10.4 LICENSEE shall not use HARVARD's name or insignia, or any adaptation of them, or the name of any of HARVARD's inventors in any advertising, promotional or sales literature without the prior written approval of HARVARD.

10.5 Without the prior written approval of HARVARD in each instance, neither this Agreement nor the rights granted hereunder shall be transferred or assigned in whole or in part by LICENSEE to any person whether voluntarily or involuntarily, by operation of law or otherwise, except that each of LICENSEE and its AFFILIATES may assign this Agreement in connection with a merger, consolidation or sale or transfer of all or substantially all of its assets. This Agreement shall be binding upon the respective successors, legal representatives and assignees of HARVARD and LICENSEE.

10.6 The interpretation and application of the provisions of this Agreement shall be governed by the laws of the Commonwealth of Massachusetts.

10.7 LICENSEE shall comply with all applicable laws and regulations. In particular, it is understood and acknowledged that the transfer of certain commodities and technical data is subject to United States laws and regulations controlling the export of such commodities and technical data, including all Export Administration Regulations of the United States Department of Commerce. These laws and regulations among other things, prohibit or require a license for the export of certain types of technical data to certain specified countries. LICENSEE hereby agrees and gives written assurance that it will comply with all United States laws and regulations controlling the export of commodities and technical data, that it will be solely responsible for any violation of such by LICENSEE or its AFFILIATES or SUBLICENSEES, and that it will defend and hold HARVARD, CHILDREN, and MIT harmless in the event of any legal action of any nature occasioned by such violation.

10.8 LICENSEE agrees: (i) to obtain all regulatory approvals required for the manufacture and sale of LICENSED PRODUCTS and LICENSED PROCESSES; and (ii) to utilize appropriate patent marking on such LICENSED PRODUCTS. LICENSEE also agrees to register or record this Agreement as is required by law or regulation in any country where the license is in effect.

10.9 Any notices to be given hereunder shall be sufficient if signed by the party (or party's attorney) giving same and either: (i) delivered in person; (ii) mailed certified mail return receipt requested; or (iii) faxed to other party if the sender has evidence of successful transmission and if the sender promptly sends the original by ordinary mail, in any event to the following addresses:

If to LICENSEE:

Mycometrix Corporation
213 E. Grand Ave.
South San Francisco, CA 94080
Attention:
Fax: (650)-

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

If to HARVARD:

Office for Technology and Trademark Licensing
Harvard University
Holyoke Center, Suite 727
1350 Massachusetts Avenue
Cambridge, MA 02138
Fax: (617) 495-9568

By such notice either party may change their address for future notices.

Notices delivered in person shall be deemed given on the date delivered. Notices sent by fax shall be deemed given on the date faxed. Notices mailed shall be deemed given on the date postmarked on the envelope.

10.10 Should a court of competent jurisdiction later hold any provision of this Agreement to be invalid, illegal, or unenforceable, and such holding is not reversed on appeal, it shall be considered severed from this Agreement. All other provisions, rights and obligations shall continue without regard to the severed provision, provided that the remaining provisions of this Agreement are in accordance with the intention of the parties.

10.11 In the event of any controversy or claim arising out of or relating to any provision of this Agreement or the breach thereof, the parties shall try to settle such conflict amicably between themselves. Subject to the limitation stated in the final sentence of this Section 10.11, any such conflict which the parties are unable to resolve promptly shall be settled through arbitration conducted in accordance with the rules of the American Arbitration Association. The demand for arbitration shall be filed within a reasonable time after the controversy or claim has arisen, and in no event after the date upon which institution of legal proceedings based on such controversy or claim would be barred by the applicable statute of limitation. Such arbitration shall be held in Boston, Massachusetts. The award through arbitration shall be final and binding. Either party may enter any such award in a court having jurisdiction or may make application to such court for judicial acceptance of the award and an order of enforcement, as the case may be. Notwithstanding the foregoing, either party may, without recourse to arbitration, assert against the other party a third-party claim or cross-claim in any action brought by a third party, to which the subject matter of this Agreement may be relevant.

10.12 This Agreement constitutes the entire understanding between the parties and neither party shall be obligated by any condition or representation other than those expressly stated herein or as may be subsequently agreed to by the parties hereto in writing.

[The remainder of this page is intentionally blank.]

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

PRESIDENT AND FELLOWS OF HARVARD COLLEGE	MYCOMETRIX CORPORATION
/s/ Joyce Brinton	/s/ Gajus Worthington
Joyce Brinton, Director Office for Technology and Trademark Licensing	President
12/20/00	12/21/00
Date	Date

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APPENDIX A

The following comprise PATENT RIGHTS:

[***]

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Exhibit 10.9

HARVARD UNIVERSITY
Office for Technology and Trademark Licensing

Holyoke Center, Suite 727
1350 Massachusetts Avenue
Cambridge, MA 02138 USA

t. 617.495.3067
f. 617.495.9568
www.techtransfer.harvard.edu

December 22, 2004

William M. Smith
Vice President, Legal Affairs
Fluidigm Corporation
7100 Shoreline Court
South San Francisco, CA 94080

Subject: Letter Agreement between Fluidigm and Harvard Concerning Harvard Case Numbers [***]

Dear Bill,

Fluidigm Corporation (Fluidigm) has licensed a number of Harvard University (Harvard) owned patents and patent applications in the area of [***]. In particular, on October 15, 2000, Fluidigm (then known as Mycometrix Corporation) licensed Harvard Case Numbers [***], all exclusively or co- exclusively. Fluidigm has since terminated the license to Case Numbers [***], and the parties have mutually agreed in this letter to hereby terminate Fluidigm's licenses to Case Numbers [***]. Fluidigm is retaining its licenses to Case Numbers [***].

Fluidigm is concerned that Harvard or a licensee of Harvard may file claims in the previously or hereby terminated Case Numbers [***] or [***] that cover inventions that are not separately patentable (as described in 37 CFR 1.601(n)) from inventions covered, as of the date of this letter, by the pending or issued claims in Case Numbers [***]. Fluidigm further is concerned that Harvard or a licensee of Harvard may file claims in the previously or hereby terminated Case Numbers [***] that (a) cover inventions that (i) are separately patentable (as described in 37 CFR 1.601(n)) from inventions covered, as of the date of this letter, by the pending or issued claims in Case Numbers [***], and (ii) would meet the criteria of 35 USC §§102, 103 and 112 for patentability in Case Numbers [***], and (b) are not now pending in any of Case Numbers [***]. Fluidigm believes it has rights (through its co-exclusive license agreements to Case Numbers [***],)) to the not separately patentable inventions and the separately patentable inventions, each as described above. Harvard is willing to address Fluidigm's concerns through this letter agreement.

Therefore, Harvard and Fluidigm agree as follows:

A) Harvard agrees not to file, or to permit any other to file, claims in the previously or hereby terminated Case Numbers [***], that cover inventions that are not

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separately patentable (as described in 37 CFR 1.601(n)) from inventions covered, as of the date of this letter, by the pending or issued claims in Case Numbers [***], without the prior express written consent of Fluidigm given after the date of this letter.

B) Harvard agrees to first offer to Fluidigm for licensing any claims, filed after the date of this letter, in Case Number [***] that (a) cover inventions that (i) are separately patentable (as described in 37 CFR 1.601(n)) from inventions covered, as of the date of this letter, by the pending or issued claims in Case Numbers [***], and (ii) would meet the criteria of 35 USC §§102, 103 and 112 for patentability in Case Numbers [***], and (b) are not now pending in any of Case Numbers [***]. Fluidigm agrees to inform Harvard within one month after Fluidigm receives express written notice form Harvard of the existence of said claims (together with a copy of such claims) whether it desires a license to said claims, or else Harvard shall be free to license them to other parties. Any license agreement between Fluidigm and Harvard for said claims shall be negotiated in good faith by the parties, have a field no broader than that now pending in Fluidigm's license to Case [***], have commercially reasonably royalties and be substantially like Harvard's then current license agreement with diligence requirements based on an acceptable development plan provided by Fluidigm; provided, however, if the parties have not entered into such license agreement within [***] after Fluidigm receives express written notice from Harvard of the existence of the applicable claims (together with a copy of such claims), then any license agreement between Fluidigm and Harvard for said claims shall be on the same terms and conditions, and in the same form, as the parties' license agreements with respect to Case Numbers [***], (as in effect as of the date of this letter), except that the license will be a non-exclusive license.

C) Harvard represents that all patent applications in Case Numbers [***] have been abandoned as of the date of this letter. Harvard agrees not to revive any such patent application or to file any other patent application under Case Number [***].

D) Fluidigm agrees to pay [***] of Harvard's reasonable out-of-pocket patent expenses, incurred after the date of this letter agreement, in Case Number [***], and within [***] of receiving an invoice from Harvard, up to a maximum aggregate amount of [***]. Harvard agrees to inform Fluidigm if any US patent or patent application in Case Number [***] becomes involved in an interference proceeding in the US Patent and Trademark Office before Harvard has incurred any expense to allow Fluidigm to terminate this letter agreement.

E) The parties mutually agree that the license to Case Numbers [***] hereby are terminated, and in connection therewith, promptly following the first meeting of the Board of Directors of Fluidigm after such date, Fluidigm shall issue to Harvard [***] of Common Stock of Fluidigm. Fluidigm represents that, in its last institutional round of financing, Fluidigm sold shares of its Series D Preferred Stock at a price of $2.80 per share. Harvard makes to Fluidigm, as of the date of the issuance of such [***], the same representations and warranties with respect to such shares as those representations and warranties set forth in Paragraph 4.2(c)(ii)(1), (2) and (3) of the

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license for Case Number [***] regarding the Shares. Paragraphs 4.2(c)(iii) and (iv) of the license for Case Number [***] shall apply as well to such [***].

Fluidigm may terminate this Letter Agreement in writing with thirty (30) days written notice to Harvard and owe no patent expenses incurred by Harvard in Case Number [***] after said thirty day notice period.

F) Harvard may terminate this Letter Agreement for any material breach by Fluidigm of its obligations under Paragraphs (D) or (E) of this letter if Harvard gives express written notice to Fluidigm of such breach and such breach is not cured within thirty (30) days after Fluidigm's receipt of such notice.

G) Any disputes between the parties regarding this letter shall be resolved in the same manner as disputes are resolved under Fluidigm's licenses to Case Numbers [***].

H) The parties acknowledge that each party may currently have a different interpretation of certain aspects of the three remaining license agreements. With respect to the three remaining license agreements, the provisions of this letter are intended by the parties solely to provide specific protective mechanisms regarding the subject matter licensed by Harvard to Fluidigm. This letter shall not prejudice either parties' interpretation or intent of the three remaining license agreements, and is not intended to constitute the parties' interpretation of the three remaining license agreements (including the original intent thereof).

Sincerely,

/s/ Robert Benson
Robert Benson, PhD
Associate Director

Agreed to:

PRESIDENT AND FELLOWS OF HARVARD COLLEGE:	Fluidigm Corporation:
/s/ Robert Benson for	/s/ Gajus Worthington
Joyce Brinton	Signature
Director Office for Technology and Trademark Licensing	President and CEO Title
Date: Dec. 23, 2004	Date: 12/23/04

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 10.10

PATENT LICENSE AGREEMENT 3950.LICI.001 Gyros AB

This Agreement, effective as of January 9, 2003, is made by and between **GYROS AB** having its principal office at Uppsala Science Park, SE-751 83 Uppsala, Sweden, a corporation organized and existing under the laws of Sweden (hereinafter referred to as **"Licensor"),** and **FLUIDIGM Corporation** having its principal office at 7100 Shoreline Court, South San Francisco, CA 94080, a corporation organized and existing under the laws of the state of California, U.S.A (hereinafter referred to as the **"Licensee").**

RECITALS

WHEREAS, the Licensor is the holder of intellectual property pertaining to, and possesses a special expertise in the field of fluidic microsystems.

WHEREAS, the Licensor is active in the field of microfluidics and microfluidic applications, primarily within the Life Sciences and Diagnostics.

WHEREAS, the Licensor is the owner of certain patents and patent applications pertaining to microfluidics and microfluidic applications.

WHEREAS, Licensor is willing to grant Licensee a royalty-bearing non-exclusive licence to such patents on the terms and conditions given below.

NOW, THEREFORE, in consideration of the promises and the faithful performance of the covenants herein contained IT IS AGREED;

ARTICLE 1 DEFINITIONS

1.1 **"Affiliate"** shall mean any corporation, partnership, or other business entity controlled by, or controlling, or under common control with any party or signatory to this Agreement, with "control" meaning direct or indirect beneficial ownership of more than fifty percent (50%) of the voting power, or of the interest in the income of such corporation, partnership or other entity, or having the power to appoint the majority of its directors or otherwise having the power to direct its business activities.

1.2 **"Competitor of Licensor"** shall mean a company in the business of making and selling compact disc-like structures in which fluids are moved by centrifugal force.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1.3 **"Net Sales"** shall mean the gross selling price charged by Licensee for Products manufactured or sold by the Licensee in a country in which the Product is covered by a Patent (i.e., a country in which, but for the license granted herein, the Product would infringe a valid, enforceable, unexpired claim of a Patent) less:

(a) allowances for damaged and returned goods;

(b) discounts actually credited to customers or commissions paid to third parties in amounts customary in the trade;

(c) custom duties, forwarding insurance premiums, sales, excise, and other taxes actually paid by the Licensee or otherwise included in the gross selling price with respect to the sale of Products;

A Product shall be considered sold hereunder in accordance with extant GAAP accounting procedures and guidelines.

If the Products are sold in combination with, or as a component of, other products not licensed hereunder, Net Sales for purposes of determining royalty hereunder shall be calculated by multiplying the Net Sales from the combined product by the fraction A/B, where A is the invoice price of the Products sold separately and B is the invoice price of the combined product. If the Products are not sold separately, the Net Sales for purposes of calculating royalties hereunder shall be reasonably determined by agreement of Licensor and the Licensee promptly after such combination products are sold by Licensee. The parties agree to use good faith in negotiating the appropriate adjustment to Net Sales of any combined product within thirty (30) days after the Licensee notifies Licensor of sales of a combination product. The Net Sales of any Products sold by the Licensee to any Affiliate of the Licensee or any other person or organization enjoying a special course of dealing with the Licensee, shall be determined by reference to the Net Sales which would be applicable under this Article 1.2 in an arm's length sale of such Products by the Licensee to a third party.

1.4 **"Patents"** shall mean the patents listed in Exhibit A, attached hereto, together with any other corresponding patents/ patent applications in any country owned or controlled by the Licensor.

1.5 **"Covered Products"** shall mean all products now or hereafter manufactured, assembled, used or sold by or on behalf of the Licensee or its Affiliates and which are covered by any of the Patents.

It is hereby acknowledged that any and all products consisting of compact discs ("CD's") and CD-like structures where a centrifugal force is utilized to move the liquids within the CD are explicitly excluded from this definition.

1.6 **"Option Field of Use"** means each of (i) [***] and (ii) [***].

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

"Licensed Fields of Use" means [***] and each Option Field of Use for which Licensee exercises the option as set forth in Section 5.2 below.

1.8 **"Product"** means each Covered Product useful, used, or for use in a Licensed Field of Use.

ARTICLE 2 GRANT

2.1 Upon the terms and subject to the conditions of this Agreement, Licensor hereby grants to the Licensee and its Affiliates, and the Licensee and its Affiliates accept from Licensor, a restricted, perpetual, irrevocable (except as set forth in Section 9.1), non-exclusive, non-transferable (except as set forth in Section 7.4), royalty-bearing license under the Patents for the term hereof solely to make, have made, import, use, offer for sale, and sell Products. No other license is granted to the Licensee expressly, impliedly or by estoppel, except as explicitly set forth in Section 5.2 below.

The Licensee expressly acknowledges and agrees that the Licensee shall have no right to sublicense, assign, or otherwise transfer any or all of the license granted to it under the Patents, except as set forth in Section 9.1, provided that Licensee can sublicense Patents to a third party other than a Competitor of Licensor (as defined in Section 7.4) in conjunction with a license from Licensee to make and sell any of Licensee's Products. Licensor reserves the right to practice the Patents itself, and to sublicense, assign or otherwise transfer the Patents to others for any purposes whatsoever, provided that such transfer or assignment shall be subject to the licenses granted to Licensee in this Agreement.

2.3 Licensor hereby irrevocably releases Licensee and its Affiliates, and each of their subcontract manufactures and direct and indirect customers, of and from all claims of infringement of Patents, known or unknown, which claims have been made or might have been made at any time, with respect to any apparatus made, used, imported, offered for sale, or sold, or any method or process practiced, before the effective date of this Agreement, which apparatus, method, or process would have been licensed had it been made, used, imported, offered for sale, or sold, or practiced after effective date of this Agreement. A corresponding release will be deemed made in relation to each of the Option Fields of Use when and if exercised under Section 5.2 below.

ARTICLE 3 PATENT MARKING

Beginning two (2) years after the effective date of this Agreement, Licensee shall display or cause to be displayed proper patent notices on the documentation, inserts, packages or containers of all Products which shall indicate that the Product is sold or manufactured under a patent license from Licensor. The Licensee shall provide Licensor for its review prior to use,

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representative samples containing such patent notices and the parties agree to use good faith in determining the requirements for and adequacy of such notices under the controlling patent laws.

ARTICLE 4 RESTRICTIONS ON PUBLICATION

Upon the signing of this Agreement and upon exercise of any of the Option Fields of Use under 5.2, both parties shall be entitled to make public — through a press release or otherwise - that Licensee has taken a license to the Patents from the Licensor. Such press-release or similar shall be in a form reasonably acceptable to the other party and shall not disclose any of the financial terms agreed in this Agreement. Within thirty (30) days of the effective date of this Agreement, Licensee will publish on its corporate website that it has taken a license from Licensor under the Patents. Under all other circumstances, neither party shall use the other's name nor any variation thereof, nor any emblem, logo, trademark or variation thereof, nor the name of any employee in any press releases, advertising, promotional or sales literature, or in any securities reports required by the Securities and Exchange Commission, without the prior written consent of the other party in each case; provided however, that both parties (a) may refer to publications by employees of the other party in the scientific literature, (b) may only state that a non-exclusive, royalty-bearing patent license from Licensor to Licensee has been granted (excluding financial terms) and (c) may make such disclosures as required by law.

ARTICLE 5 ROYALTIES AND PAYMENT

5.1 In consideration of the rights granted by Licensor to the Licensee under this Agreement, the Licensee agrees to pay to Licensor:

(a) a non-refundable sum of [***] payable on March 31, 2003 ("Annual Payment Date"). The foregoing payment includes full payment for all sales by the Licensee of Products before the effective date of this Agreement;

(b) a sum of [***] payable on each anniversary of the Annual Payment Date during the term of this Agreement; and

(c) a royalty of [***] of the Net Sales of all Products sold by the Licensee during the term of this Agreement. Sums paid under Subsections 5.1 (a) and (b) above, and Section 5.2 below, shall be fully creditable against such royalties, regardless of the year in which such royalties accrue.

5.2 At any time(s) during the first twelve (12) months of the term of this Agreement, Licensee shall be entitled, at its option, to add one or both Option Fields of Use to the Licensed Field of Use under this Agreement, and upon each such exercise, each such Option Field of Use shall become a Licensed Field of Use under this Agreement. If Licensee has not, during the first

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twelve (12) month period of the term of this Agreement, added both Option Fields of Use to the Licensed Field of Use, then during the second twelve (12) month period of the term of this Agreement, Licensee shall be entitled, at its option, to add one Option Field of Use to the Licensed Field of Use under this Agreement. Each such exercise of this option by Licensee shall be by written notice to Licensor, referencing this Agreement and specifying the Option Field(s) of Use to be added. Within thirty (30) days after such exercise, Licensee shall pay an additional [***] license fee for the first added Option Field of Use, and an additional [***] license fee for the second added Option Field of Use. For the avoidance of doubt, during the first twelve (12) month period of the term of this Agreement, Licensee may exercise this option for one or both Option Fields of Use and on one or two occasions.

5.3 Within thirty (30) days of the end of each calendar quarter the Licensee shall pay to Licensor the royalty having accrued on the Products sold during such calendar quarter to the extent the royalty exceeds the credited sums paid by Licensee. Such payments shall be made in US Dollars by wire transfer, at the Licensee's cost, to such bank as shall be notified by Licensor. Payments of royalties accrued on sales in other currencies than US Dollars shall be made in US Dollars at the rate of exchange quoted by a first class commercial bank in the Licensee's country on the last day of the relevant calendar quarter.

5.4 If the Licensee fails to make the payments as provided for herein, such amounts shall bear interest from and after the due date at the rate of [***] above the one month LIBOR for the currency of payment.

5.5 Withholding or other taxes assessed on Licensor in connection with the payment of royalties and other consideration due hereunder and which the Licensee is required by law to deduct and withhold when making payments, may be deducted from royalty payments hereunder (including without limitation payments under Sections 5.1(a), 5.1(b), and 5.2) and shall be paid by the Licensee to the competent authority on behalf of Licensor. The originals of the official government receipt for such taxes paid by the Licensee on Licensor's behalf, shall so indicate such fact and shall be sent by the Licensee to Licensor not later than fifteen (15) working days after the date of payment, indicating net payment of royalties to which such taxes relate, and in accordance with the instructions given by Licensor. The sums so paid by the Licensee shall be credited by Licensor in partial discharge of the Licensee's obligation for gross royalties as provided for herein.

ARTICLE 6 RECORDS, AUDITS AND REPORTS

6.1 The Licensee agrees to maintain accurate, complete and up to date records, until five (5) years after a royalty payment has been made, in sufficient detail to enable the royalties payable by the Licensee to be determined. Licensor shall have the right, at its own expense and during regular business hours, at any time upon sixty (60) days prior written notice to Licensee, during the term of this Agreement and for one (1) year thereafter, to have such records examined, in its own discretion, by an independent auditor of its own choice, provided such auditor is bound by confidentiality in writing to Licensee and reasonably acceptable to the

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Licensee. The auditor shall not disclose the contents of the examination to any other entity and shall use the information only to verify proper reporting and payment of royalties under this Agreement.

6.2 Once Licensee's royalty obligations have exceeded the sums paid under Subsections 5.1(a) and (b) above or in the event of a completed initial public offering of Licensee's common stock, then Licensee agrees to deliver to Licensor within forty-five (45) days of the end of each subsequent calendar quarter a confidential written report, in a format to be agreed by the parties and made an exhibit to this Agreement, of all Products sold by it during such quarter in sufficient detail to permit a calculation of the royalties due thereon. Licensor shall not disclose the contents of the report to any other entity and shall use the information only to verify proper reporting and payment of royalties under this Agreement. Such report shall include, but not be limited to, information of the total quantities of Products sold and the Net Sales thereof on a country by country basis, and the amount of royalties due.

ARTICLE 7 TERM AND TERMINATION

7.1 Unless otherwise terminated as provided for in this Agreement, the license shall run to the end of the life of the last to expire of the Patents.

7.2 The Licensee shall have the right to terminate this Agreement and surrender the license granted hereunder at any time by giving thirty (30) days' written notice to Licensor.

7.3 If Licensor or the Licensee is in default in the performance of any of its respective obligations under this Agreement, including the failure by the Licensee to make any of the payments provided for at the times specified herein, and such default is not cured within ninety (90) days after the aggrieved party has given to the other a written notice specifying the nature of the default, the aggrieved party shall have the right to terminate this Agreement by giving written notice of termination to the other, subject to the remainder of this section. Upon the giving of such notice this Agreement shall terminate; provided, however, that if there is a dispute as to the alleged default (including as to whether there is a default, or whether it has been cured), the aggrieved party alleging the default shall not be entitled to terminate unless and until a further notice of termination after (i) an agreed dispute resolution entity has determined that there was a default, as specified in the aggrieved party's notice of default, that was not cured within the applicable cure period and (ii) the defaulting party does not cure the default within thirty (30) days after such determination.

7.4 If during the term of this Agreement, Licensee effects a Competitor Assignment (as defined in Section 9.1), or a change of control over Licensee takes place meaning that fifty percent (50%) or more of the shares in Licensee come under common control of a third party Competitor of Licensor or Affiliates of such Competitor of Licensor, or if Licensee and/or certain of its shareholders enter into an arrangement of a similar effect, Licensor shall be entitled to terminate this Agreement on sixty (60) days prior written notice to Licensee. Upon such termination by Licensor, Licensor shall promptly refund to Licensee (or its successor) a

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[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

pro rata (on a day for day basis) the annual payment made by Licensee for that year under Section 5.1(a), 5.1(b), or 5.2, as applicable.

7.5 If during the term of this Agreement, the Licensee becomes bankrupt or insolvent, or if the business of Licensor or the Licensee is placed in the hands of a receiver or trustee, whether by voluntary act or otherwise, this Agreement shall immediately and automatically terminate.

7.6 The following rights and obligations shall survive any termination to the degree necessary to permit their complete fulfilment or discharge:

(a) the Licensee's obligation to supply a final report on each impacted Product in accordance with Section 6.2 above with respect to the terminated license;

(b) Licensor's right to receive or recover and the Licensee's obligation to pay royalties, including minimum royalties, if any, accrued or accruable for payment at the time of any termination;

(c) the Licensee's obligation to maintain records and to allow Licensor to audit such records as provided for herein.

ARTICLE 8 RESTRICTED WARRANTY AND INDEMNITY

8.1 The Licensor represents and warrants that it has full authority to enter into this Agreement, that it has not granted, and will not grant, any rights or licenses that would conflict with the rights and licenses granted in this Agreement, that it is not aware of any third party claims with respect to any Patent, and that it has no knowledge of any third party rights that would affect its ability to grant the license hereunder. Licensor further represents and warrants that the Patents are the only patent filings owned or controlled by Licensor or its Affiliates, or which Licensor or its Affiliates otherwise have the right to enforce, license or sublicense, which pertain to microfluidics based on multilayer soft lithography or its uses. However, the Licensor makes no representation or warranty, express or implied, as to the validity of the Patents nor to the merchantability or satisfactory quality of the Products that are or may be sold by the Licensee. Licensor does not assume any liability for any infringement or alleged infringement of any patent or other rights of third parties due to the Licensee's activities under the license set forth herein.

8.2 The Licensee shall assume full responsibility for its use of the Patents and shall defend Licensor and its officers, directors, agents, and employees ("Indemnified Parties") against any claims or actions arising out of this Agreement by reason of death, personal injury, illness or property damage, or any other injury or damage arising out of the use by the Licensee of the Patents or the preparation of, use or sale of Products, including but not limited to, use or reliance upon such Products by the Licensee's customers, and Licensee shall indemnify the Indemnified Parties against all liability, costs, damages, and expenses awarded against the Indemnified Parties with respect to such claims or actions.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

ARTICLE 9 MISCELLANEOUS

9.1 Assignment. This Agreement is personal to the Licensee who shall not have any right to assign or transfer the Agreement, in whole or in part, or the license granted hereunder, without the prior written consent of Licensor, which shall not be unreasonably withheld; provided, however, that Licensee may transfer or assign its rights and obligations under this Agreement to a successor to all or substantially all of Licensee's Product business relating to one or more Licensed Fields of Use, whether by sale, merger or otherwise, provided further that that Licensee shall not have the right to transfer or assign this Agreement to a Competitor of Licensor ("Competitor Assignment") without the prior written consent of Licensor . Notwithstanding the foregoing, Licensor shall have the right to assign or transfer this Agreement, in whole or in part, to any Affiliate.

9.2 Entire Agreement. This Agreement constitutes the entire agreement between the parties as to the subject matter hereof, and all prior negotiations, representations, agreements and understandings are merged into, extinguished by and completely expressed by it. This Agreement may be modified or amended only by a writing executed by authorized officers of each of the parties.

9.3 Waiver. The waiver by either Licensor or the Licensee of any right or failure to perform or of any breach by the other shall not be deemed as a waiver of any other right hereunder or of any other breach or failure by the other, whether of a similar nature or otherwise.

9.4 Notices. Any notice or other communication relating to this Agreement shall be sent registered mail or overnight express prepaid or telefax/telecopier to the address of the party to be served therewith which is shown below and shall be deemed to have been given upon the date the notice or communication was sent:

If to Licensor:	**Gyros AB**	Att: Maris Hartmanis President & CEO Uppsala Science Park S-751 83 Uppsala, Sweden Telefax: +46 (18) 56 6350
with a copy to:	rambe legal consultants	Att: Lars J. Rambe, LL.M Telefax +46-8-6508835
If to the Licensee:	**Fluidigm Corporation**	

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Att: Gajus Worthington
President & CEO
7100 Shoreline Court
South San Francisco
CA 94080

Telefax: (650) 871-7152

with a copy to: Fluidigm General Counsel

Att: William M. Smith

Telefax: (650) 871-7195

Such addresses may be changed by notice so given.

9.5 Severability. If any provision of this Agreement is held to be unenforceable for any reason, it shall be adjusted rather than voided, if possible, in order to achieve the intent of the parties to the extent possible. In any event, all other provisions of this Agreement shall be deemed valid and enforceable to the full extent possible consistent with the intent of the parties.

9.6 Governing Law. This Agreement and its effects shall be subject to and shall be construed and enforced in accordance with the laws of the state of New York, U.S.A.

9.7 Disputes. Any dispute in connection with this Agreement shall be first elevated to each party's respective President for a period of thirty (30) days prior to giving a notice of default under section 9.3 above, who shall convene a face-to-face meeting prior to pursuing any legal courses of action.

IN WITNESS WHEREOF, the parties hereto have caused their respective duly authorized representatives to execute this Agreement the day and year first above written.

Gyros AB		**Fluidigm Corporation**	
By:	/s/ Maris Hartmanis	By:	/s/ Gajus Worthington
	Maris Hartmanis		Gajus Worthington
By:	/s/ (ILLEGIBLE)	By:	

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit A

Patent family:

[***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 10.10A

AMENDMENT NO. 1 TO
PATENT LICENSE AGREEMENT

This Amendment No. 1 (the "Amendment") to the parties' January 9, 2003 Patent License Agreement is entered into as of the date of the latter signature below by and between **GYROS AB** having its principal office at Uppsala Science Park, SE-751 83 Uppsala, Sweden, a corporation organized and existing under the laws of Sweden (hereinafter referred to as **"Licensor")** , and **FLUIDIGM Corporation** having its principal office at 7100 Shoreline Court, South San Francisco, CA 94080, a corporation organized and existing under the laws of the state of California, U.S.A (hereinafter referred to as the **"Licensee").**

RECITALS

A. The parties have entered into a January 9, 2003 Patent License Agreement (the "Agreement"); and

B. The parties desire to amend the Agreement to include an additional Option Field of Use, and to extend Licensee's time period for exercising the remaining, unexercised Option Fields of Use, on the terms and conditions set forth herein.

NOW, THEREFORE, the parties agree that the Agreement is amended as follows:

1. In order to add "protein analysis" as an additional Option Field of Use, Section 1.6 of the Agreement is amended to read in its entirety as follows:

"1.6 **'Option Field of Use'** means each of (i) [***] (ii) [***] and (iii) [***]"

It is acknowledged that Licensee has previously exercised its option in accordance with Section 5.2 of the Agreement for the Option Field of Use "nucleic acid analysis," and made the required payment with respect thereto, and that therefore "nucleic acid analysis" is already a Licensed Field of Use.

2. Section 5.1(b) of the Agreement is amended by adding the following at the end: ", in consideration of the rights granted to Licensee pursuant to Amendment No. 1 to this Agreement, on or before February 9, 2005 Licensee shall pay to Licensee an additional, one time license fee of [***] and".

3. With respect to the remaining two Option Fields of Use (i.e. cell assays, and protein analysis), Section 5.2 of the Agreement is amended to read in its entirety as follows:

"5.2 At any time(s) until and including January 9, 2007 (Pacific Standard Time), Licensee shall be entitled, at its option, to add one or both of the remaining, unexercised Option Fields of Use to the Licensed Field of Use under this Agreement, and upon each such exercise, each such Option Field of Use shall become a Licensed Field of Use under this Agreement. Each such exercise of this option

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

by Licensee shall be by written notice to Licensor, referencing this Agreement and specifying the Option Field(s) of Use to be added. Within thirty (30) days after each such exercise, Licensee shall pay an additional [***] license fee for each added Option Field of Use. For the avoidance of doubt, until and including January 9, 2007 (Pacific Standard Time), Licensee may exercise this option for one or both of the remaining, unexercised Option Fields of Use and on one or two occasions."

4. All payments designated to be made in Swedish kronor shall be made by Licensee in Swedish kronor by wire transfer to a Licensor account designated by Licensor, including all necessary information, in writing to Licensee.

5. Except as expressly provided in this Amendment, the Agreement shall remain unmodified and in full force and effect. In the event of any inconsistency or conflict, the provisions of this Amendment shall control and govern over the provisions of the Agreement. The Agreement, as amended herein, shall constitute a single, integrated contract.

Gyros AB	**Fluidigm Corporation**
By: /s/ Rolf Ehmstrom	By: /s/ Gajus Worthington
Print Name: Rolf Ehmstrom	Print Name: Gajus Worthington
Title: CEO (acting)	Title: CEO
Date: 2005-01-09	Date: 01/04/05

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Confidential Treatment Requested by Fluidigm Corporation

Exhibit 10.11

MASTER CLOSING AGREEMENT

By and Among

FLUIDIGM CORPORATION,
a California corporation,

OCULUS PHARMACEUTICALS, INC.,
a Delaware corporation,

and

THE UAB RESEARCH FOUNDATION

dated

March 7, 2003

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

TABLE OF CONTENTS

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

TABLE OF CONTENTS
(continued)

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

TABLE OF CONTENTS
(continued)

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBITS AND SCHEDULES

Exhibit	Description
A	Amended and Restated Articles of Incorporation of Fluidigm
B	Form of New License Agreement
C	Form of Sponsored Research Agreement
D	Description of Technology

Schedule	Description
4.6	Pending Litigation

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

MASTER CLOSING AGREEMENT

THIS MASTER CLOSING AGREEMENT is entered into as of March 7, 2003 by and among FLUIDIGM CORPORATION, a California corporation ("Fluidigm"), OCULUS PHARMACEUTICALS, INC., a Delaware corporation ("Oculus"), and THE UAB RESEARCH FOUNDATION ("UABRF").

RECITALS

A. Oculus and UABRF have entered into a license agreement dated September 21, 2001 (together with all amendments and modifications thereto, the " License Agreement ") under which Oculus was granted an exclusive license to practice the intellectual property and technology relating to nanovolume crystallization arrays described in Schedule A to the License Agreement.

B. The parties hereto have entered into a binding letter agreement dated December 19, 2002 (the "Letter Agreement ") under which Oculus and UABRF have agreed to terminate the License Agreement, UABRF has agreed to grant to Fluidigm an exclusive license to practice the intellectual property and technology relating to nanovolume crystallization arrays covered by the License Agreement, and Fluidigm and UABRF have agreed to enter into a sponsored research agreement. In exchange for the rights to be acquired by Fluidigm as contemplated by the Letter Agreement, Fluidigm has paid cash in the amount of [***] pursuant to the Letter Agreement and has agreed to the payment of additional cash and securities as specified in the Letter Agreement.

C. The parties desire to enter into this Agreement to set out additional terms and conditions related to the closing of the transactions, and the payments to be made by Fluidigm, contemplated by the Letter Agreement.

NOW, THEREFORE, in consideration of the representations, warranties and agreements herein contained, the parties agree as follows:

ARTICLE I

DEFINITIONS

As used in this Agreement, the following terms shall have the meanings set forth or referenced below:

1.1 "Affiliate" of any specified person shall mean any other person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified person. For purposes of this definition, "control" when used with respect to any specified person means the power to direct or cause the direction of the management and policies of such person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1.2 "Ancillary Documents" shall mean all documents or agreements required by this Agreement to be executed or delivered by any party hereto.

1.3 "Assigned Rights" shall mean any intellectual property rights owned by Oculus that pertain in any way to the Technology, including without limitation any Inventions (as such term is defined in Section 11 of the License Agreement) and any other patent rights and other intellectual property rights therein owned by Oculus.

1.4 "Cash Consideration" shall mean the sum of cash in the amount of [***] paid in accordance with the Letter Agreement and the Closing Cash Consolidation.

1.5 "Closing" shall mean the closing of the transactions contemplated by this Agreement.

1.6 "Closing Cash Consideration" shall mean cash in the amount of [***].

1.7 "Closing Date" shall mean March 7, 2003, or such other date to which the parties shall mutually agree in writing.

1.8 "Encumbrances" shall mean restrictions on or conditions to transfer or assignment, claims, liabilities, licenses, immunities from lawsuits to third parties, liens, pledges, mortgages or security interests of any kind, whether accrued, absolute, contingent, or otherwise.

1.9 "Fluidigm Series C Preferred Stock" shall mean the Series C Preferred Stock of Fluidigm having the rights, preferences and privileges set forth in Fluidigm's Articles of Incorporation attached hereto as Exhibit A .

1.10 "License Agreement" shall mean the license agreement between Oculus and UABRF as described in Recital A.

1.11 "New License Agreement" shall mean the license agreement between Fluidigm and UABRF in the form of Exhibit B attached hereto.

1.12 "Sponsored Research Agreement" shall mean the sponsored research agreement between Fluidigm and UABRF in the form of Exhibit C attached hereto.

1.13 "Technology" shall mean all intellectual property and other rights relating to nanovolume crystallization arrays described in Exhibit D attached hereto.

1.14 "Transfer Taxes" shall mean all sales taxes, use taxes, conveyance taxes, transfer taxes, filing fees, recording fees, reporting fees and other similar duties, taxes and fees, if any, imposed upon, or resulting from, the transfer of the Assigned Rights hereunder, except federal, state or local income or similar taxes based upon or measured by revenue, income, profit or gain from the transfer of the Assigned Rights or the operation of Oculus' business prior to the Closing or by any increase in the value of any of the Assigned Rights through the Closing Date.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

ARTICLE II

TRANSFER OF ASSIGNED RIGHTS AND LICENSE OF TECHNOLOGY

2.1 Transfer of Rights and License of Technology. Oculus and UABRF have mutually terminated the License Agreement as of January 30, 2003 and Oculus has surrendered all rights under the License Agreement to UABRF. Subject to and upon the terms and conditions of this Agreement, effective as of the Closing, Fluidigm and UABRF will enter into the New License Agreement. It is the intent of the parties that all intellectual property rights subject to the License Agreement as of November 27, 2002 shall be transferred and/or assigned to Fluidigm, and that all such rights owned by UABRF shall be licensed to Fluidigm under the New License Agreement, subject to the reservation by UABRF of certain rights as set forth in the License Agreement.

2.2 Excluded Assets and Liabilities. Notwithstanding the provisions of Section 2.1, (a) Fluidigm and Oculus expressly acknowledge and agree that Oculus shall not sell, transfer, assign, convey or deliver to Fluidigm, and Fluidigm shall not purchase, acquire or accept from Oculus, any right, title or interest of Oculus in or to any other property or assets of Oculus, and (b) Fluidigm does not assume, and Oculus does not transfer or assign, any liabilities or obligations, whether presently fixed and determined, contingent or otherwise, of Oculus.

2.3 Payment. In consideration of the execution of the New License Agreement and the transfer of the rights thereunder, Fluidigm will deliver to UABRF the Closing Cash Consideration and [* * *] shares of Fluidigm Series C Preferred Stock valued at 2.58 per share, the price at which Fluidigm sold and issued shares of its Series C Preferred Stock to other investors.

2.4 Taxes. Fluidigm and Oculus shall each pay (or reimburse the other for) one-half of all Transfer Taxes, whether imposed by law on Fluidigm and Oculus or otherwise.

2.5 Assigned Rights. Oculus hereby sells, assigns and transfers to Fluidigm all Assigned Rights, free and clear of all Encumbrances (except to the extent that the settlement agreement pertaining to the Lawsuit (as such term is defined in Section 6.3) may include an immunity from lawsuits for conduct arising prior to the date of the settlement agreement).

2.6 Unassignable Rights.

(a) Notwithstanding any provision of this Agreement or any of the Ancillary Documents, but subject to Section 11.3(c), to the extent that any of the Assigned Rights are not assignable or otherwise transferable to Fluidigm, or if such assignment or transfer would constitute a breach thereof or a violation of any applicable law, then neither this Agreement nor such Ancillary Documents shall constitute an assignment or transfer (or an attempted assignment or transfer) thereof until such consent, approval or waiver of such party or parties has been duly obtained.

(b) If any consent required to transfer the Assigned Rights to Fluidigm has not been obtained as of the Closing Date and Fluidigm nevertheless determines to proceed with the

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Closing, Oculus and UABRF shall, at their own expense, continue to cooperate with Fluidigm and use commercially reasonable efforts to obtain such consent after the Closing.

(c) If any Assigned Right is not transferred to Fluidigm at the Closing pursuant to this Agreement, Oculus and Fluidigm shall cooperate with each other in any reasonable arrangement designed to provide for Fluidigm all of the benefits of such Assigned Rights. At Fluidigm's request, Oculus shall take all reasonable actions requested by Fluidigm to enforce for the benefit of Fluidigm any and all rights of Oculus with respect to any such Assigned Right that is not otherwise transferred pursuant to the provisions of this Agreement. Oculus agrees to hold in trust for, and remit promptly to, Fluidigm all future collections or payments received by Oculus in respect of all such Assigned Rights (net of all costs and expenses incurred by Oculus in respect thereto); provided, however, that nothing herein shall create or provide any rights or benefits in or to third parties.

(d) If any intellectual property rights that are described in the New License Agreement cannot be licensed to Fluidigm by UABRF under the New License Agreement without the consent of any third party or without resulting in a breach or default of any agreement affecting such rights, UABRF covenants and agrees that it shall not sue or otherwise take any legal action to restrict or prevent Fluidigm and Fluidigm's permitted assignees and sublicensees from practicing such intellectual property rights as purported to be granted under the terms of the New License Agreement.

(e) If, subsequent to the Closing, a claim brought by any party challenging any of the transactions contemplated hereby results in any ruling or order which has the result of frustrating in a material way the transfer of any of the Assigned Rights hereunder to Fluidigm or the grant of rights to Fluidigm under the New License Agreement or Fluidigm's use thereof as provided herein, Oculus and UABRF shall cooperate with Fluidigm in any reasonable arrangement designed to give Fluidigm, as nearly as practicable, the same economic benefits as if such transfer or license, as the case may be, had been consummated in accordance with the provisions hereof.

(f) Nothing in this Section 2.6 shall be deemed to modify in any respect any of the representations or warranties of Oculus and UABRF set forth herein or the conditions to Fluidigm's obligations contained in this Agreement, be deemed a waiver by Fluidigm of its right to have received on or before the Closing Date an effective assignment of all of the Assigned Rights or be deemed to constitute an agreement to exclude any assets from the Assigned Rights.

ARTICLE III

THE CLOSING

3.1 The Closing. The Closing shall take place at the offices of Gray Cary Ware & Freidenrich LLP, 400 Hamilton Avenue, Palo Alto, California, at 11:00 a.m., Pacific Time, on the Closing Date, or at such other time and place as Oculus, Fluidigm and UABRF may agree.

3.2 Termination of License Agreement. On or before the Closing, Oculus and UABRF shall deliver to Fluidigm an agreement and acknowledgment that the License

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Agreement has been terminated and such other agreements and instruments as may be necessary or appropriate to evidence the return by Oculus to UABRF of all rights under the License Agreement.

3.3 Agreements Between Fluidigm and UABRF. At the Closing, Fluidigm and UABRF shall execute and deliver the New License Agreement and the Sponsored Research Agreement.

3.4 Other Documents. Each party shall deliver to the other at the Closing such other documents, certificates, schedules, agreements and instruments required by this Agreement to be delivered at such time.

ARTICLE IV

REPRESENTATIONS AND WARRANTIES OF OCULUS

Oculus hereby represents and warrants to Fluidigm as follows:

4.1 Organization. Oculus is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power to own, lease and operate its properties and to conduct its business as it is currently being conducted. Oculus is duly qualified or licensed to do business as a foreign corporation in each jurisdiction in which the failure to be so qualified or licensed would have a material adverse effect on Oculus.

4.2 Authorization. This Agreement and all of the Ancillary Documents to which Oculus is or will be a party have been, or upon their execution and delivery hereunder will have been, duly and validly executed and delivered by Oculus and constitute, or will constitute, valid and binding agreements of Oculus, enforceable against Oculus in accordance with their respective terms, except as enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally or by principles of public policy or general equitable principles or the exercise of judicial discretion in accordance with such principles. Oculus has the requisite corporate power and authority to execute and deliver this Agreement and the Ancillary Documents to which Oculus is or will be a party and, at the time of the Closing, will have the requisite corporate power and authority to carry out the transactions contemplated by this Agreement and the Ancillary Documents. The execution, delivery and performance by Oculus of this Agreement and the Ancillary Documents have been duly and validly approved and authorized by the Board of Directors and shareholders of Oculus.

4.3 No Conflicts; Consents. The execution and delivery by Oculus of this Agreement and the Ancillary Documents to which Oculus is or will be a party do not, and the consummation of the transactions contemplated hereby and thereby and compliance by Oculus with the provisions hereof and thereof will not, contravene, conflict with, result in a breach of, constitute a default (with or without notice or lapse of time, or both) under or violation of, or result in the creation of any Encumbrance pursuant to, (i) any provision of the Certificate of Incorporation or Bylaws of Oculus, (ii) any judgment, order, decree, rule, law or regulation of any court or

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governmental authority, foreign or domestic, applicable to Oculus or to any of the Assigned Rights, except where any such contravention, conflict, breach or default could not reasonably be expected to have a material adverse effect on Fluidigm's ownership of the Assigned Rights, or (iii) any provision of any material agreement, instrument or understanding to which Oculus is a party or by which Oculus is bound or any of the Assigned Rights are affected, except where any such contravention, conflict, breach or default could not reasonably be expected to have a material adverse effect on Fluidigm's ownership of the Assigned Rights, nor will such actions give to any other person or entity any interests or rights of any kind, including rights of termination, acceleration or cancellation, in or with respect to any of the Assigned Rights, or result in the creation of any Encumbrance on any of the Assigned Rights. No consent, approval, order or authorization of, or registration, declaration or filing with, any third party or any governmental authority is required to be obtained on the part of Oculus to permit the consummation of the transactions contemplated by this Agreement or the Ancillary Documents.

4.4 Title to Assigned Rights. Oculus has good and marketable title to all of the Assigned Rights. All of the Assigned Rights are free and clear of any Encumbrances (except to the extent that the settlement agreement pertaining to the Lawsuit (as such term is defined in Section 6.3) may include an immunity from lawsuits for conduct arising prior to the date of the settlement agreement). At the Closing, Oculus will sell, convey, assign, transfer and deliver to Fluidigm good, valid and marketable title and all right and interest in and to all of the Assigned Rights, free and clear of any Encumbrances.

4.5 No Assignment. Oculus has not sublicensed or otherwise transferred any material rights under the License Agreement to any third party. As of December 19, 2002, the License Agreement was in full force and effect in accordance with its terms. Prior to the termination of the License Agreement, no provisions of the License Agreement had been waived in any material respect. Exhibit D lists all of the patent filings subject to the License Agreement. To the knowledge of Oculus, UABRF is the owner of the patent rights within the technology and inventions subject to the License Agreement and has not granted a license to such technology and inventions to any person or entity other than Oculus.

4.6 Litigation and Claims. Except as set forth on Schedule 4.6 attached hereto, there are no claims, actions, suits, proceedings arbitrations or investigations in progress or pending (or, to the knowledge of Oculus, threatened) before any court, tribunal or governmental agency against Oculus that relate to any of the Assigned Rights. Oculus is not a party to any judgment, decree, order or arbitration award (or agreement entered into in any administrative, judicial or arbitration proceeding with any governmental authority) with respect to any of the Assigned Rights.

4.7 Distribution Agreement. Oculus has entered into a mutually acceptable agreement with UABRF regarding the distribution of any and all consideration to be paid by Fluidigm in connection with the transactions contemplated by this Agreement.

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ARTICLE V

REPRESENTATIONS AND WARRANTIES OF FLUIDIGM

Fluidigm hereby represents and warrants to Oculus and UABRF as follows:

5.1 Organization. Fluidigm is a corporation duly organized, validly existing and in good standing under the laws of the State of California and has all requisite corporate power to own, lease and operate its properties, to conduct its business as it is currently being conducted. Fluidigm is duly qualified or licensed to do business as a foreign corporation in each jurisdiction in which the failure to be so qualified or licensed would have a material adverse effect on Fluidigm.

5.2 Authorization. This Agreement and all of the Ancillary Documents to which Fluidigm is or will be a party have been, or upon their execution and delivery hereunder will have been, duly and validly executed by Fluidigm and constitute, or will constitute, valid and binding agreements of Fluidigm, enforceable against Fluidigm in accordance with their respective terms, except as enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally or by principles of public policy or general equitable principles or the exercise of judicial discretion in accordance with such principles. Fluidigm has the requisite corporate power and authority to execute and deliver this Agreement and the Ancillary Documents to which Fluidigm is or will be a party and, at the time of the Closing, will have the requisite corporate power and authority to sell, issue and deliver the Securities pursuant to this Agreement and to carry out the other transactions contemplated by this Agreement and the Ancillary Documents. The execution, delivery and performance by Fluidigm of this Agreement and the Ancillary Documents have been duly and validly approved and authorized by Fluidigm's Board of Directors and by all requisite action of Fluidigm's stockholders.

5.3 No Conflicts; Consents. The execution and delivery by Fluidigm of this Agreement and the Ancillary Documents to which Fluidigm is or will be a party do not, and the consummation of the transactions contemplated hereby and thereby and compliance by Fluidigm with the provisions hereof and thereof will not, contravene, conflict with, result in a breach of, constitute a default (with or without notice or lapse of time, or both) under or violation of, or result in the creation of any Encumbrance pursuant to, (i) any provision of the Articles of Incorporation or Bylaws of Fluidigm, (ii) any judgment, order, decree, rule, law or regulation of any court or governmental authority, foreign or domestic, applicable to Fluidigm except where such any such contravention, conflict, breach or default could not reasonably be expected to have a material adverse effect on the consummation of the transactions contemplated hereby, or (iii) any provision of any agreement, instrument or understanding to which Fluidigm is a party or by which Fluidigm is bound, except where such any such contravention, conflict, breach or default could not reasonably be expected to have a material adverse effect on the consummation of the transactions contemplated hereby. No consent, approval, order or authorization of, or registration, declaration or filing with, any third party or any governmental authority is required to be obtained on the part of Fluidigm to permit the consummation of the transactions contemplated by this Agreement or the Ancillary Documents.

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5.4 Litigation and Claims. There are no claims, actions, suits, proceedings, arbitrations or investigations in progress or pending (or, to Fluidigm's knowledge, threatened, other than potential claims relating to the Interfering Patent (as such term is defined in Section 12.1(a) below), including, but not limited to, a possible interference) before any court, tribunal or governmental agency, against or relating to Fluidigm, which, if determined adversely to Fluidigm, would be likely to have a material adverse effect upon Fluidigm's financial condition or materially impair its ability to carry out and perform its obligations hereunder.

5.5 Securities Laws Exemptions. Based in part on the representations of UABRF contained in Section 6.5, the issuance of the Securities pursuant to the terms of this Agreement will be exempt from the registration requirements of the Securities Act and the regulations thereunder, and the registration, permit or qualification requirements of any applicable state securities laws.

ARTICLE VI

REPRESENTATIONS AND WARRANTIES OF UABRF

To the best knowledge of the UABRF Director and Dr. Larry DeLucas, UABRF hereby represents to Fluidigm as follows:

6.1 Authorization. This Agreement and the Ancillary Documents to which UABRF is or will be a party have been, or upon their execution and delivery hereunder will have been, duly and validly executed and delivered by UABRF and constitute, or will constitute, valid and binding agreements of UABRF, enforceable against UABRF in accordance with their respective terms, except as enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally or by principles of public policy or general equitable principles or the exercise of judicial discretion in accordance with such principles. UABRF has full power and authority to execute and deliver this Agreement and the Ancillary Documents to which UABRF is or will be a party and, at the time of the Closing, will have all requisite power and authority to carry out the transactions contemplated by this Agreement and the Ancillary Documents. All university, foundation and other internal approvals necessary for UABRF to consummate the transactions contemplated by this Agreement and the Ancillary Documents to which UABRF is or will be a party have been obtained.

6.2 No Conflicts; Consents. The execution and delivery by UABRF of this Agreement and the Ancillary Documents to which UABRF is or will be a party do not, and the consummation of the transactions contemplated hereby and thereby and compliance by UABRF with the provisions hereof and thereof will not, contravene, conflict with, result in a breach of, constitute a default (with or without notice or lapse of time, or both) under or violation of, or result in the creation of any Encumbrance pursuant to, (i) any provision of the charter documents of UABRF, (ii) any judgment, order, decree, rule, law or regulation of any court or governmental authority, foreign or domestic, applicable to UABRF or to the Technology, except where any such contravention, conflict, breach or default could not reasonably be expected to have a material adverse effect on Fluidigm's rights under the New License Agreement or the consummation of the transactions contemplated hereby, or (iii) any provision of any agreement, instrument or understanding to which UABRF is a party or by which UABRF is bound or any of

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the Technology is affected, except where such any such contravention, conflict, breach or default could not reasonably be expected to have a material adverse effect on Fluidigm's rights under the New License Agreement or the consummation of the transactions contemplated hereby, nor will such actions give to any other person or entity any interests or rights of any kind, including rights of termination, acceleration or cancellation, in or with respect to any of the Technology, or result in the creation of any Encumbrance on any of the Technology. No consent, approval, order or authorization of, or registration, declaration or filing with, any third party or any governmental authority is required to be obtained on the part of the UABRF to permit the consummation of the transactions contemplated by this Agreement or the Ancillary Documents.

6.3 Title to Technology. UABRF is the sole owner of the technology, inventions and patent rights in the Technology and subject to the License Agreement and has not granted a license to such technology, inventions and patent rights to any person or entity other than Oculus. The License Agreement has been mutually terminated by UABRF and Oculus and neither Oculus nor any other party has any rights thereunder. UABRF has the right to grant an exclusive license to the technology, inventions, patent rights and other rights under the New License Agreement to Fluidigm, free and clear of any Encumbrances of any nature whatsoever, subject to those liens, encumbrances or restrictions which may arise as a result of the settlement of the litigation between Oculus and Syrrx, Inc. (" Syrrx ") described in Schedule 4.6 (the " Lawsuit "), provided that Syrrx shall have no rights that may be exercised after the Closing to practice the technology, inventions, patent rights and other rights subject to the New License Agreement, and the potential infringement by Diversified Scientific, Inc. of the Licensed IP Rights (as such term is defined in the New License Agreement) described in Section 2.2.3 of the New License Agreement. Exhibit D lists all of the patent filings subject to the License Agreement. UABRF is not aware of any third-party challenges to the ownership, validity or entitlement to priority date of any of the patent filings subject to the License Agreement or the New License Agreement, except for the Lawsuit between Oculus and Syrrx and the settlement agreement related to said Lawsuit provided to Fluidigm pursuant to Section 7.2 of this Agreement.

6.4 Litigation and Claims. Except as set forth on Schedule 4.6 attached hereto, there are no claims, actions, suits, proceedings, arbitrations or investigations in progress or pending (or, to the knowledge of UABRF, threatened) before any court, tribunal or governmental agency against UABRF that relate to any of the Technology. UABRF is not a party to any judgment, decree, order or arbitration award (or agreement entered into in any administrative, judicial or arbitration proceeding with any governmental authority) with respect to any of the Technology, except to the extent that UABRF may be deemed to be a party thereto as a result of UABRF's status as a shareholder of Oculus and having a member on the Board of Directors of Oculus as well as the status of Dr. Larry DeLucas as a member of the Board of Directors of Oculus and a shareholder of Oculus.

6.5 Distribution Agreement. UABRF has entered into a mutually acceptable agreement with Oculus regarding the distribution of any and all consideration to be paid by Fluidigm in connection with the transactions contemplated by this Agreement.

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6.6 Investment Representations

(a) UABRF is acquiring the shares of Fluidigm capital stock to be issued hereunder (the "Securities") for investment and not with the view to the public resale or distribution thereof, and UABRF has no present intention of selling, granting any participation in, or otherwise distributing the Securities, other than in accordance with the terms of a Termination Agreement dated as of ____, 2003 between UABRF and Oculus. UABRF understands that the Securities have not been registered under the Securities Act by reason of a specific exemption thereunder, which depends upon, among other things, the bona fide nature of UABRF's investment intent as expressed herein.

(b) UABRF acknowledges that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or Fluidigm receives an opinion of counsel satisfactory to Fluidigm that such registration is not required. UABRF is aware of the provisions of Rule 144 promulgated under the Securities Act which permit limited resale of stock purchased in a private placement subject to the satisfaction of certain conditions.

(c) UABRF understands that no public market now exists for the Securities and that there can be no assurance that a public market will ever exist for the Securities.

(d) UABRF is an "accredited investor" as defined in the Securities Act, and has such knowledge and experience in financial and business matters that it is capable of evaluating the merits and risks of the investment in the Securities.

(e) UABRF has been given the opportunity to obtain any information or documents related to, and ask questions and receive answers about Fluidigm and its business, prospects and risks which UABRF deems necessary, to evaluate the merits and risks related to UABRF's investment in the Securities and to verify the information UABRF received.

(f) UABRF's financial condition is such that it can afford to bear the economic risk of holding the Securities for an indefinite period of time, and it has adequate means of providing for its current needs and contingencies and to suffer a complete loss of its investment in such Securities.

6.7 Restrictions. No Securities shall be sold, assigned, transferred or pledged except upon the conditions specified in this Agreement. UABRF will cause any proposed purchaser, assignee, transferee or pledgee of the Securities to agree in writing to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

6.8 Restrictive Legend. Each certificate representing the Securities shall (unless otherwise permitted by the provisions of Section 6.9 below) be stamped or otherwise imprinted with a legend in the following form (in addition to any legend required under applicable state securities laws):

"THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). SUCH

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SECURITIES MAY NOT BE SOLD, TRANSFERRED OR PLEDGED IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS THE COMPANY RECEIVES AN OPINION OF COUNSEL (WHICH MAY BE COUNSEL FOR THE COMPANY) OR OTHER EVIDENCE REASONABLY ACCEPTABLE TO IT STATING THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF THE SECURITIES ACT."

"THE SECURITIES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A MARKET STAND-OFF AGREEMENT IN THE EVENT OF A PUBLIC OFFERING, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY."

UABRF consents to Fluidigm making a notation on its records and giving instructions to any transfer agent of the Securities in order to implement the restrictions on transfer established in Sections 6.7 through 6.10 of this Agreement.

6.9 Notice of Proposed Transfers. UABRF and any transferee of any certificate representing the Securities, by acceptance thereof, agrees to comply in all respects with the restrictions on transfer contained in Sections 6.7 through 6.10 of this Agreement. Prior to any proposed sale, assignment, transfer or pledge of any Securities (other than any transfer not involving a change in beneficial ownership), unless there is in effect a registration statement under the Securities Act covering the proposed transfer, the holder thereof shall give written notice to Fluidigm of such holder's intention to effect such transfer, sale, assignment or pledge. Each such notice shall describe the manner and circumstances of the proposed transfer, sale, assignment or pledge in sufficient detail, and shall be accompanied at such holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall be, reasonably satisfactory to Fluidigm, addressed to Fluidigm, to the effect that the proposed transfer of the Securities may be effected without registration under the Securities Act, or (ii) a "no action" letter from the Securities and Exchange Commission (the "Commission") to the effect that the transfer of such Securities without registration will not result in a recommendation by the staff of the Commission that action be taken with respect thereto, or (iii) any other evidence reasonably satisfactory to counsel to Fluidigm, whereupon the holder of such Securities shall be entitled to transfer such Securities in accordance with the terms of the notice delivered by the holder to Fluidigm; provided, however, that no such legal opinion, "no action" letter or other evidence shall be required with respect to a transfer to an affiliate of the holder. Each certificate evidencing the Securities transferred as above provided shall bear, except if such transfer is made pursuant to Rule 144, the appropriate restrictive legend set forth in Section 6.8 above, except that such certificate shall not bear such restrictive legend if, in the opinion of counsel for such holder and Fluidigm, such legend is not required in order to establish compliance with any provisions of the Securities Act or this Agreement.

6.10 Standoff Agreement. UABRF agrees in connection with Fluidigm's initial sale of securities pursuant to an effective registration statement, upon notice by Fluidigm or the underwriters managing such offering, not to sell, make any short sale of, loan, pledge (or

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otherwise encumber or hypothecate), grant any option for the purchase of, or otherwise directly or indirectly dispose of any Securities (other than those included in the registration) without the prior written consent of Fluidigm and such managing underwriters for such period of time as Fluidigm's Board of Directors establishes pursuant to its good faith negotiations with such managing underwriters; provided, however that:

(i) such agreement shall not exceed one hundred eighty (180) days;

(ii) such agreement shall not apply to transfers to an affiliate, provided that such affiliate agrees to be bound by the terms of such agreement, to the same extent as if such transferee were the original party thereunder;

(iii) UABRF shall not be subject to such agreement unless (A) all executive officers and directors of Fluidigm, (B) all shareholders of Fluidigm holding more than 1% of Fluidigm's outstanding capital stock and (C) all holders of registration rights, are subject to or obligated to enter into similar agreements; and

(iv) if and when any person identified in clause (iii) is released, in whole or in part, from such agreement (whether or not such release is contemplated at the time of the offering) or if any such agreement is terminated, UABRF shall be concurrently released on a pro rata basis based on the number of Securities held by such person and UABRF.

(b) UABRF agrees that prior to the initial public offering it will not transfer securities of Fluidigm unless each transferee agrees in writing to be bound by all of the provisions of this Section 6.10, provided that this Section 6.10 shall not apply to transfers pursuant to a registration statement.

UABRF hereby consents to the placement of stop transfer orders with Fluidigm's transfer agent in order to enforce the foregoing provision and agrees to execute a market standoff agreement with said underwriters in customary form consistent with the provisions of this Section 6.10.

ARTICLE VII

COVENANTS OF OCULUS

7.1 Conduct of Business. During the period from the date of this Agreement to the Closing, Oculus will conduct its business in the ordinary course consistent with past practices. During the period from the date of this Agreement to the Closing, Oculus will not without the prior written consent of Fluidigm:

(a) encumber or permit to be encumbered any of the Technology or Assigned Rights;

(b) dispose of any of the Technology or Assigned Rights;

(c) waive or release any right or claim relating to any Technology or Assigned Rights; or

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(d) agree to do any of the things described in the preceding clauses of this Section 7.1.

Fluidigm agrees that the foregoing restrictions will not prevent Oculus from entering into a settlement agreement with Syrrx to settle the Lawsuit, provided that such settlement does not involve the sale, transfer or assignment of the Technology or the Assigned Rights, or any rights in any of the foregoing, or result in the creation of any Encumbrance on the Technology, the Assigned Rights, or any rights in any of the foregoing.

7.2 Access to Information. Until the earlier of the termination of this Agreement or the Closing, Oculus will allow Fluidigm and its agents reasonable access upon reasonable notice and during normal working hours to its files, books, records, and offices relating to the Technology and Assigned Rights, except where prohibited by contract or protected by privilege. In furtherance of the above, Fluidigm and its counsel and advisors shall have reasonable access during normal business hours to pertinent contracts of Oculus, including an unsigned final version of the settlement agreement between Oculus and Syrrx related to the Lawsuit, and drafts of such settlement agreement (to the extent it is permissible under applicable confidentiality terms and with the understanding that Oculus may be required to obtain the return or destruction by Fluidigm of the final version and drafts of such settlement agreement prior to its execution), as well as all scientific notebooks, invention records and other documents related to the conception and reduction to practice and prosecution of the patent filings listed on Exhibit D , including, without limitation, all patent searches, patent file wrappers, legal and scientific investigations and research related to the Technology, the License Agreement and the New License Agreement.

7.3 Regulatory Approvals. Prior to the Closing, Oculus will execute and file, or join in the execution and filing of, any application or other document that may be reasonably necessary in order to obtain the authorization, approval or consent of any governmental entity that may be required in connection with the consummation of the transactions contemplated by this Agreement. Oculus will use commercially reasonable efforts to obtain all such authorizations, approvals and consents.

7.4 Satisfaction of Conditions Precedent. Oculus will use commercially reasonable efforts to satisfy or cause to be satisfied all the conditions precedent to the Closing hereunder, and to cause the transactions contemplated hereby to be consummated, and, without limiting the generality of the foregoing, to obtain all consents and authorizations of third parties and to make all filings with, and give all notices to, third parties which may be necessary or reasonably required on its part in order to effect the transactions contemplated hereby.

ARTICLE VIII

COVENANTS OF UABRF

8.1 Conduct of Business. During the period from the date of this Agreement to the Closing, UABRF will not without the prior written consent of Fluidigm:

(a) encumber or permit to be encumbered any of the Technology;

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(b) dispose of any of the Technology;

(c) waive or release any right or claim relating to any Technology; or

(d) agree to do any of the things described in the preceding clauses of this Section 8.1.

Fluidigm agrees that the foregoing restrictions will not prevent UABRF from consenting to a settlement agreement between Oculus and Syrrx to settle the Lawsuit, provided that such settlement does not involve the sale, transfer or assignment of the Technology or the Assigned Rights, or any rights in any of the foregoing, or result in the creation of any Encumbrance on the Technology, the Assigned Rights, or any rights in any of the foregoing.

8.2 Access to Information. Until the earlier of the termination of this Agreement or the Closing, UABRF will allow Fluidigm and its agents reasonable access upon reasonable notice and during normal working hours to its files, books, records, and offices relating to the Technology and Assigned Rights, except where prohibited by contract or protected by privilege. In furtherance of the above, Fluidigm and its counsel and advisors shall have reasonable access during normal business hours to pertinent scientific notebooks, invention records and other documents related to the conception and reduction to practice and prosecution of the patent filings listed on Exhibit D, including, without limitation, all patent searches, patent file wrappers, legal and scientific investigations and research related to the Technology, the License Agreement and the New License Agreement.

8.3 Regulatory Approvals. Prior to the Closing, UABRF will execute and file, or join in the execution and filing of, any application or other document that may be reasonably necessary in order to obtain the authorization, approval or consent of any governmental entity that may be required in connection with the consummation of the transactions contemplated by this Agreement. UABRF will use commercially reasonable efforts to obtain all such authorizations, approvals and consents.

8.4 Satisfaction of Conditions Precedent. UABRF will use commercially reasonable efforts to satisfy or cause to be satisfied all the conditions precedent to the Closing hereunder, and to cause the transactions contemplated hereby to be consummated, and, without limiting the generality of the foregoing, to obtain all consents and authorizations of third parties and to make all filings with, and give all notices to, third parties which may be necessary or reasonably required on its part in order to effect the transactions contemplated hereby.

ARTICLE IX

COVENANTS OF FLUIDIGM

9.1 Regulatory Approvals. Prior to the Closing, Fluidigm will execute and file, or join in the execution and filing of, any application or other document that may be reasonably necessary in order to obtain the authorization, approval or consent of any governmental entity that may be required in connection with the consummation of the transactions contemplated by this Agreement. Fluidigm will use its commercially reasonable efforts to obtain all such authorizations, approvals and consents.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

9.2 Satisfaction of Conditions Precedent. Fluidigm will use commercially reasonable efforts to satisfy or cause to be satisfied all the conditions precedent to the Closing hereunder, and to cause the transactions contemplated hereby to be consummated, and, without limiting the generality of the foregoing, to obtain all consents and authorizations of third parties and to make all filings with, and give all notices to, third parties which may be necessary or reasonably required on its part in order to effect the transaction contemplated hereby.

ARTICLE X

MUTUAL COVENANTS

10.1 Confidentiality. The parties acknowledge that the Confidential Disclosure Agreement dated as of October 8, 2002 between Fluidigm and Oculus and the Confidential Disclosure Agreement dated December 19, 2002 between Fluidigm, Oculus and UABRF are binding upon the parties hereto and in full force and effect, except to the extent that the provisions hereof supersede provisions to similar effect contained in the Confidential Disclosure Agreements. The terms of the Confidential Disclosure Agreements (exclusive of such superseded provisions) are incorporated in this Agreement by this reference.

10.2 Publicity. Except as may otherwise be required by law, none of the parties hereto shall make or cause to be made any public announcements in respect of this Agreement or the transactions contemplated herein or otherwise communicate with any news media without the prior written consent of the other party, provided, however, that following the Closing Fluidigm may issue a press release to announce the closing of the transactions contemplated hereby and the execution and delivery of the New License Agreement and Sponsored Research Agreement with UABRF provided that such press release shall not be issued prior to the execution by Syrrx of a settlement agreement with Oculus to settle the litigation described in Schedule 4.6 but in any event the press release may be issued no later than 30 days from the execution date of the New License Agreement. Except for the press release issued by Fluidigm, none of the parties hereto will make any public disclosure prior to the Closing or with respect to the Closing unless all parties agree on the text and timing of such public disclosure, except as required by law. Nothing contained in this Section shall prevent any party at any time from furnishing any information pursuant to the requirements of any governmental entity; provided, however, that if such party is required to furnish such information, it will provide a copy to the other parties.

10.3 Governmental Filings. As promptly as practicable after the execution of this Agreement, each party shall make any and all governmental filings required with respect to the transactions contemplated in this Agreement and the Ancillary Documents.

ARTICLE XI

CONDITIONS TO CLOSING

11.1 Conditions to Each Party's Obligations. The respective obligations of each party to effect the transactions to be performed by such party at the Closing are subject to the satisfaction at or prior to the Closing of the following conditions any of which may be waived in writing by each party:

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(a) No order shall have been entered, and not vacated, by a court or administrative agency of competent jurisdiction, in any action or proceeding which enjoins, restrains or prohibits the sale of the Assigned Rights, the grant of rights under the New License Agreement or the consummation of any other transaction contemplated hereby.

(b) All permits, authorizations, approvals and orders required to be obtained under all applicable statutes, codes, ordinances, rules and regulations in connection with the transactions contemplated hereby shall have been obtained and shall be in full force and effect at the Closing Date.

(c) There shall be no litigation pending or threatened by any regulatory body or private party in which (i) an injunction is or may be sought against the transactions contemplated hereby, or (ii) relief is or may be sought against any party hereto as a result of this Agreement and in which, in the good faith judgment of the Board of Directors of either Fluidigm, Oculus or UABRF (relying on the advice of their respective legal counsel), such regulatory body or private party has the probability of prevailing and such relief would have a material adverse affect upon such party.

11.2 Conditions to Obligations of Oculus and UABRF. The obligations of Oculus and UABRF to effect the transactions to be performed by Oculus and UABRF at the Closing are subject to the satisfaction at or prior to the Closing of the following additional conditions any of which may be waived in writing by Oculus and UABRF:

(a) All of the representations and warranties of Fluidigm set forth in Article V hereof shall be true in all material respects on and as of the Closing Date with the same force and effect as if they had been made at the Closing, except for changes contemplated by this Agreement.

(b) All of the terms, covenants and conditions of this Agreement to be complied with and performed by Fluidigm at or prior to the Closing shall have been duly complied with and performed in all material respects.

11.3 Conditions to Obligations of Fluidigm. The obligations of Fluidigm to effect the transactions to be performed by it at the Closing are subject to the satisfaction at or prior to the Closing of the following additional conditions any of which may be waived in writing by Fluidigm:

(a) All of the representations and warranties of Oculus and UABRF set forth in Articles IV and VI hereof shall be true in all material respects on and as of the Closing Date with the same force and effect as if they had been made at the Closing, except for changes contemplated by this Agreement.

(b) All of the terms, covenants and conditions of this Agreement to be complied with and performed by Oculus and UABRF at or prior to the Closing shall have been duly complied with and performed in all material respects.

(c) All required consents from third parties required to allow the consummation of the sale of the Assigned Rights, the grant of rights under the New License

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Agreement and the other transactions contemplated hereby shall have been obtained and delivered to Fluidigm.

(d) Fluidigm shall have received an opinion from the attorney(s) prosecuting the patent filings listed on Exhibit D, in form and substance reasonably acceptable to Fluidigm, as to the following matters: (i) assignments of the inventions covered by the patent filings to UABRF have been properly filed with the United States Patent and Trademark Office ("USPTO"), (ii) UABRF is named as the sole owner of the inventions covered by the patent filings listed on Exhibit D , (iii) a declaration of interference was timely requested with at least one of the pending U.S. patent applications listed on Exhibit D and U.S. Patent No. 6,296,673 with the USPTO in accordance with U.S.C. Section 135, (iv) none of the patents listed on Exhibit D have been held to be permanently revoked, unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and none of the patents listed on Exhibit D have been admitted to be invalid or unenforceable through reissue or disclaimer or otherwise, and (v) the patent applications listed on Exhibit D were filed in good faith and have not been abandoned or finally disallowed without the possibility of appeal or refiling of such application.

ARTICLE XII

POST-CLOSING MATTERS

12.1 Additional Payments by Fluidigm. In addition to the consideration delivered by Fluidigm at the Closing, Fluidigm will pay the following amounts to UABRF upon the achievement of the following milestones:

(a) Milestone 1. Milestone 1 shall be satisfied upon a declaration by the USPTO of an interference between a pending patent application in the Technology and U.S. Patent No. 6,296,673 (the "Interfering Patent). Within thirty (30) days after Fluidigm receives written notice of the USPTO declaration of interference, Fluidigm will issue shares of its stock having a value of $600,000 (based on the fair value of the stock at the time Milestone 1 is achieved), subject to compliance with applicable securities laws.

(b) Milestone 2. Milestone 2 shall be satisfied upon the achievement of freedom to operate (as specified below) with respect to relevant claims in the Interfering Patent for Fluidigm's Topaz3 crystallization microprocessor, as determined by Fluidigm in its sole discretion that either (i) a U.S. patent has issued from an application listed on Exhibit D or subsequent applications claiming priority thereto with claims that the USPTO has determined are entitled to priority in view of claims in the Interfering Patent and which claims cover the Topaz crystallization microprocessor, or (ii) a cross-license for the Technology has been signed by Fluidigm and a third party controlling the Interfering Patent and related applications such that the interference is terminated and Fluidigm has freedom to operate with respect to the Interfering Patent and related filings. Within thirty (30) days after such determination by Fluidigm, Fluidigm will issue shares of its stock having a value of $1,500,000 (based on the fair value at the time Milestone 2 is achieved), subject to compliance with applicable securities laws. In addition, (i) Fluidigm will enter into a non-transferable site license with Athersys, Inc.

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("Athersys") under which Athersys will have the right to use the Technology for internal drug efforts, but not to provide service or equipment to third parties.

(c) Stock to be Issued. If Fluidigm is a private company at the time a milestone is achieved, upon achievement of a milestone Fluidigm will issue shares of the series of Fluidigm Preferred Stock that was issued in Fluidigm's most recent financing and the shares will be valued at the price at which the shares were sold in such financing. If Fluidigm is a public company at the time a milestone is achieved, upon achievement of a milestone Fluidigm will issue shares of Fluidigm Common Stock and the shares will be valued at the average closing price of Fluidigm's Common Stock over the five trading days preceding the achievement of the milestone.

12.2 Settlement of Lawsuit. If the Lawsuit has not been settled or dismissed as of the Closing Date:

(a) Oculus agrees that Fluidigm and its counsel and advisors shall have reasonable access during normal business hours to the final version of the settlement agreement between Oculus and Syrrx related to the Lawsuit, and drafts of such settlement agreement (to the extent permissible under applicable confidentiality terms), in the manner contemplated by Section 7.2 of this Agreement, until the Lawsuit is settled or dismissed.

(b) Oculus and UABRF agree that if a settlement agreement related to the Lawsuit is entered into after the Closing Date, the settlement will not involve the sale, transfer or assignment of the Technology or the Assigned Rights, or any rights in any of the foregoing, or result in the creation of any Encumbrance on the Technology, the Assigned Rights, or any rights in any of the foregoing.

ARTICLE XIII

TERMINATION OF AGREEMENT

13.1 Termination by Fluidigm. This Agreement may be terminated at any time before the Closing by action of the Board of Directors of Fluidigm upon written notice to Oculus and UABRF, specifying the basis for such termination, if (i) Oculus or UABRF shall have breached in any material respect any of their covenants or agreements contained in this Agreement, or (ii) any representation or warranty of Oculus or UABRF contained in this Agreement shall have been materially inaccurate.

13.2 Termination by UABRF. This Agreement may be terminated at any time before the Closing by action of the Board of Directors or other governing body of UABRF upon written notice to Fluidigm, specifying the basis for such termination, if (i) Fluidigm shall have breached in any material respect any of its covenants or agreements contained in this Agreement, or (ii) any representation or warranty of Fluidigm contained in this Agreement shall have been materially inaccurate.

13.3 Mutual Consent. This Agreement may be terminated at any time before the Closing, by the mutual written consent of Fluidigm, Oculus and UABRF.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

13.4 Effect of Termination. Upon any termination of this Agreement, all parties hereto shall be relieved of all further obligations under this Agreement, except for the provisions of Section 2.5 regarding the assignment by Oculus to Fluidigm of Assigned Rights, together with all patent rights and all other intellectual property rights therein, Section 15.6 regarding the payment of certain expenses and Section 10.1 regarding the continuing obligations of the parties under the Confidential Disclosure Agreements.

ARTICLE XIV

SURVIVAL OF REPRESENTATIONS AND WARRANTIES

14.1 Survival of Representations and Warranties. The representations and warranties set forth in this Agreement shall survive the Closing for a period equal to the greater of 12 months after the Closing Date or the date on which both Milestones specified in Section 12.1 have been achieved. After the expiration of such period, such representations and warranties shall expire and be of no further force and effect.

ARTICLE XV

GENERAL

15.1 Governing Law. It is the intention of the parties hereto that the internal laws of the State of California (irrespective of its choice of law principles) shall govern the validity of this Agreement, the construction of its terms, and the interpretation and enforcement of the rights and duties of the parties hereto; provided, however, that any disputes involving UABRF shall be governed by the internal laws of the State of Alabama (irrespective of its choice of law principles and any disputes involving UABRF shall be resolved Birmingham, Alabama in accordance with the provisions of Section 15.11 and UABRF shall have the right to raise all of the defenses available to the University of Alabama at Birmingham.

15.2 Assignment; Binding upon Successors and Assigns. None of the parties hereto may assign any of its rights or obligations hereunder (whether by operation of law or otherwise) without the prior written consent of the other party; provided, however, that any party may assign its rights and obligations under covenants and agreements to be performed after the Closing in connection with the sale of all or substantially all of such party's business. This Agreement will be binding upon and inure to the benefit of the parties hereto and their respective permitted successors and assigns.

15.3 Severability. If any provision of this Agreement, or the application thereof, becomes or is declared by a court of competent jurisdiction to be illegal, void or unenforceable, the remainder of this Agreement will continue in full force and effect and the application of such provision to other persons or circumstances shall be interpreted so as best to reasonably effect the intent of the parties hereto. The parties further agree to replace such illegal, void or unenforceable provision of this Agreement with a valid and enforceable provision which will achieve, to the extent possible, the economic, business and other purposes of the illegal, void or unenforceable provision.

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15.4 Entire Agreement. This Agreement (including the Exhibits and Schedules hereto) the Ancillary Agreements, the documents and instruments and other agreements among the parties hereto referenced herein and therein, and the exhibits thereto, constitute the entire understanding and agreement of the parties hereto with respect to the subject matter hereof and thereof and supersede all prior and contemporaneous agreements or understandings, inducements or conditions, express or implied, written or oral, between the parties with respect hereto and thereto including, without limitation, the Letter Agreement. To the extent that any provision of this Agreement conflicts with any provision of the New License Agreement or the Sponsored Research Agreement between Fluidigm and UABRF, the applicable provision of the New License Agreement or the Sponsored Research Agreement, as the case may be, shall control and supersede the applicable provision of this Agreement.

15.5 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall constitute an original and all of which together shall constitute one and the same instrument.

15.6 Expenses.

(a) The parties shall each pay their own legal, accounting and financial advisory fees and other out-of-pocket expenses incurred incident to the negotiation, preparation and carrying out of this Agreement and the transactions herein contemplated, whether or not the transactions contemplated hereby are consummated.

(b) Each party shall indemnify the other against, and agrees to hold the other harmless from, all liabilities and expenses (including reasonable attorneys' fees) in connection with any claim by any person for compensation as a broker, finder or in any similar capacity, by reason of services allegedly rendered to the indemnifying party in connection with the transactions contemplated hereby.

15.7 Other Remedies. Except as otherwise provided herein, any and all remedies herein expressly conferred upon a party shall be deemed cumulative with and not exclusive of any other remedy conferred hereby or by law on such party, and the exercise of any one remedy shall not preclude the exercise of any other.

15.8 Amendment. Any term or provision of this Agreement may be amended by a written instrument signed by Fluidigm, Oculus and UABRF; provided that any term or provision that pertains only to UABRF and Fluidigm may be amended by a written instrument signed by UABRF and Fluidigm.

15.9 Waiver. Any party hereto may, by written notice to the other party: (i) waive any of the conditions to its obligations hereunder or extend the time for the performance of any of the obligations or actions of another party; (ii) waive any inaccuracies in the representations of another party contained in this Agreement or in any documents delivered pursuant to this Agreement; (iii) waive compliance with any of the covenants of the other contained in this Agreement; or (iv) waive or modify performance of any of the obligations of another party. Except as specifically contemplated by this Agreement, no action taken pursuant to this Agreement, including without limitation any investigation by or on behalf of any party, shall be

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deemed to constitute a waiver by the party taking such action of compliance with any representation, warranty, condition or agreement contained herein. Waiver of the breach of any one or more provisions of this Agreement shall not be deemed or construed to be a waiver of other breaches or subsequent breaches of the same provisions.

15.10 Informal Resolution. In the event of any controversy or claim arising under this Agreement, officers or comparable officials of UABRF, Oculus and Fluidigm shall promptly meet and attempt in good faith to reach a resolution of such controversy or claim.

15.11 Mediation. Any controversy or claim between any of the parties hereto arising out of or relating to this Agreement that is not resolved by the parties within thirty (30) days after delivery of notice of such controversy or claim, upon written notice of either Fluidigm, Oculus or UABRF, shall be submitted for resolution by mediation in accordance with commercial mediation guidelines. Any mediation proceeding shall be conducted in the County of Cook, City of Chicago, in the State of Illinois. The mediation shall be concluded within a ninety (90) day period after notice.

15.12 Notices. All notices and other communications hereunder will be in writing and will be deemed given (i) upon receipt if delivered personally (or if mailed by registered or certified mail), (ii) the next business day after dispatch if sent by overnight delivery service, (iii) upon dispatch if transmitted by facsimile (and confirmed by a copy delivered in accordance with clause (i) or (ii)), properly addressed to the parties at the following addresses:

Fluidigm:	Fluidigm Corporation 7100 Shoreline Court South San Francisco, CA 94080 Attention: President Facsimile No.: (650) 871-7192
with a copy to:	Fluidigm Corporation 7100 Shoreline Court South San Francisco, CA 94080 Attention: General Counsel Facsimile No.: (650) 871-7195
Oculus:	Oculus Pharmaceuticals, Inc. 1601 12th Avenue South Birmingham, AL 35205 Attention: B.J. Lehman Facsimile No: (216) 361-9495 and Oculus Pharmaceuticals, Inc. 3201 Carnegie Avenue Cleveland, OH 44115 Attention: B.J. Lehman Facsimile No.: (216) 361-9495

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

UABRF: The UAB Research Foundation
1120G Administration Building
701 20th Street South
Birmingham, AL 35294-0111
Attention: Director
Facsimile No.: (205) 975-5560

Any party may change its address for such communications by giving notice thereof to the other party in conformity with this Section.

15.13 Construction and Interpretation of Agreement.

(a) This Agreement has been negotiated by the parties hereto and their respective attorneys, and the language hereof shall not be construed for or against any party.

(b) The titles and headings herein are for reference purposes only and shall not in any manner limit the construction of this Agreement, which shall be considered as a whole.

(c) Any reference to a "material adverse effect" with respect to any entity or group of entities means a material adverse effect on the business, assets (including intangible assets), financial condition, properties, liabilities, results of operations or prospects of such entity.

(d) Any reference to a party's "knowledge means such party's actual knowledge after reasonable inquiry of its directors, officers and other management level employees that have responsibility for the referenced matters.

(e) When reference is made to a Section or Article, such reference shall be to a Section or Article of the Agreement, unless otherwise indicated.

15.14 No Joint Venture. Nothing contained in this Agreement shall be deemed or construed as creating a joint venture or partnership between any of the parties hereto. No party is by virtue of this Agreement authorized as an agent, employee or legal representative of any other party. No party shall have the power to control the activities and operations of any other and their status is, and at all times, will continue to be, that of independent contractors with respect to each other. No party shall have any power or authority to bind or commit any other. No party shall hold itself out as having any authority or relationship in contravention of this Section.

15.15 Absence of Third Party Beneficiary Rights. No provisions of this Agreement are intended, nor shall be interpreted, to provide or create any third party beneficiary rights or any other rights of any kind in any client, customer, affiliate, shareholder, partner of any party hereto or any other person or entity unless specifically provided otherwise herein, and, except as so provided, all provisions hereof shall be personal solely between the parties to this Agreement.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

15.16 Further Assurances. In connection with this Agreement and the transactions contemplated hereby, each party shall execute and deliver any additional documents and instruments and perform any additional acts that may be reasonably necessary or appropriate to effectuate and perform the provisions of this Agreement and such transactions and the intention of the parties.

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[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first set forth above.

FLUIDIGM CORPORATION

By: /s/ Gajus Worthington

Title: President & CEO

OCULUS PHARMACEUTICALS, INC.

By: /s/ (ILLEGIBLE)

Title: President & CEO

THE UAB RESEARCH FOUNDATION

By: /s/ (ILLEGIBLE)

Title: Director

Acknowledged and agreed to
this March 7, 2003.

/s/ Dr. Larry DeLucas

Dr. Larry DeLucas

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SCHEDULE 4.6

Lawsuit filed by Syrrx, Inc. against Oculus on April 30, 2002 in the United States District Court for the District of Delaware — Syrrx and Oculus may enter into a settlement agreement to settle the Lawsuit prior to the Closing under the Agreement; as part of the settlement a judgment or other order will be entered against Oculus by the court in which the Lawsuit was filed.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Confidential Treatment Requested by Fluidigm Corporation

EXHIBIT A

Amended and Restated
Articles of Incorporation of Fluidigm

Superseded by Exhibit 3.1 filed with Registration Statement on April 14, 2008.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Confidential Treatment Requested by Fluidigm Corporation

AMENDED AND RESTATED

ARTICLES OF INCORPORATION OF

FLUIDIGM CORPORATION

Gajus V. Worthington and William Smith certify that:

1. They are the President and Secretary, respectively, of Fluidigm Corporation, a California corporation (the "Corporation").

2. The Articles of Incorporation of the Corporation are amended and restated in full to read as set forth in EXHIBIT A attached hereto.

3. Said Amended and Restated Articles of Incorporation have been duly approved by the Corporation's Board of Directors.

4. Said Amended and Restated Articles of Incorporation have been duly approved by the required vote of shareholders in accordance with Sections 902 and 903 of the Corporations Code. The total number of outstanding shares of the corporation is 8,363,318 shares of Common Stock, 2,727,273 shares of Series A Preferred Stock, 6,460,675 shares of Series B Preferred Stock and 16,364,832 shares of Series C Preferred Stock. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50% of the outstanding Common Stock, voting as a single class, more than 66 2/3% of the outstanding Series C Preferred Stock, voting as a single class, more than 66 2/3% of the outstanding Preferred Stock voting as a single class and more than 50% of the outstanding Common Stock and Preferred Stock, voting together as a single class.

I further declare under penalty of perjury that the matters set forth in the foregoing certificate are true and correct of my own knowledge.

Executed at Palo Alto, California, this 17th day of December, 2003.

/s/ Gajus V. Worthington
Gajus V. Worthington
President

/s/ William Smith
William Smith
Secretary

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit A

AMENDED AND RESTATED

ARTICLES OF INCORPORATION OF

FLUIDIGM CORPORATION

ARTICLE I

The name of the corporation is Fluidigm Corporation.

ARTICLE II

The purpose of this corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of California other than the banking business, the trust company business or the practice of a profession permitted to be incorporated under the California Corporations Code.

ARTICLE III

The total number of shares of stock that the corporation shall have authority to issue is One Hundred Nine Million One Hundred Twenty-Six Thousand Eight Hundred Twenty-Seven (109,126,827), consisting of Sixty-Five Million Five Hundred Thousand (65,500,000) shares of Common Stock, $0.001 par value per share, and Forty-Three Million Six Hundred Twenty-Six Thousand Eight Hundred Twenty-Seven (43,626,827) shares of Preferred Stock, $0.001 par value per share. The first series of Preferred Stock shall be designated "Series A Preferred Stock" and shall consist of Two Million Seven Hundred Twenty–Seven Thousand Two Hundred Seventy–Three (2,727,273) shares. The second series of Preferred Stock shall be designated "Series B Preferred Stock" and shall consist of Six Million Four Hundred Sixty Thousand Six Hundred Seventy-Five (6,460,675) shares. The third series of Preferred Stock shall be designated "Series C Preferred Stock" and shall consist of Twenty Million Five Hundred Fifty-One Thousand One Hundred Sixty Three (20,551,163) shares. The fourth series of Preferred Stock shall be designated "Series D Preferred Stock" and shall consist of Thirteen Million Eight Hundred Eighty-Seven Thousand Seven Hundred Sixteen (13,887,716) shares.

ARTICLE IV

The terms and provisions of the Common Stock and Preferred Stock are as follows:

1. Definitions. For purposes of this Article IV, the following definitions shall apply:

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(a) "Conversion Price" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 per share for the Series B Preferred Stock, $2.58 per share for the Series C Preferred Stock and $2.80 per share for the Series D Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(b) "Convertible Securities" shall mean any evidences of indebtedness, shares or other securities (other than shares of Common Stock) convertible into or exchangeable for Common Stock.

(c) "Corporation" shall mean Fluidigm Corporation.

(d) "Dividend Rate" shall mean an annual rate of $0.11 per share for the Series A Preferred Stock, an annual rate of $0.18 for the Series B Preferred Stock, an annual rate of $0.26 per share for the Series C Preferred Stock and an annual rate of $0.30 per share for the Series D Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(e) "Liquidation Preference" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 per share for the Series B Preferred Stock, $2.58 per share for the Series C Preferred Stock and $2.80 per share for the Series D Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(f) "Options" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(g) "Original Issue Price" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 for the Series B Preferred Stock, $2.58 per share for the Series C Preferred Stock and $2.80 per share for the Series D Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(h) "Preferred Stock" shall mean the Series A Preferred Stock, Series B Preferred Stock, the Series C Preferred Stock and the Series D Preferred Stock.

2. Dividends.

(a) Series D Preferred Stock. The holders of outstanding shares of Series D Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock or Common Stock (collectively, the " **Junior Stock** ") of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Junior Stock during any fiscal year of the Corporation, other than dividends on the Common Stock payable solely in Common Stock, until all declared dividends on the Series D Preferred Stock have been paid or set apart for payment to the holders of Series D Preferred Stock. The right to receive dividends on shares of Series D Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series D Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

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(b) Series C Preferred Stock. The holders of outstanding shares of Series C Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Series A Preferred Stock, Series B Preferred Stock or Common Stock of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Series A Preferred Stock, Series B Preferred Stock or Common Stock during any fiscal year of the Corporation, other than dividends on the Common Stock payable solely in Common Stock, until all declared dividends on the Series C Preferred Stock have been paid or set apart for payment to the holders of Series C Preferred Stock. The right to receive dividends on shares of Series C Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series C Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(c) Series A Preferred Stock and Series B Preferred Stock. The holders of outstanding shares of Series A Preferred Stock and Series B Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Common Stock of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Common Stock, other than dividends payable solely in Common Stock, until all declared dividends on the Preferred Stock have been paid or set apart for payment to the Preferred Stock holders. Payment of any dividends to the holders of the Series A Preferred Stock and Series B Preferred Stock shall be on a pro-rata, pari passu basis in proportion to the Dividend Rates for the Series A Preferred Stock and Series B Preferred Stock, as applicable. The right to receive dividends on shares of Series A Preferred Stock and Series B Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series A Preferred Stock or Series B Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(d) Distribution. For purposes of this Section 2, unless the context otherwise requires, a "**distribution**" shall mean the transfer of cash or other property without consideration whether by way of dividend or otherwise, payable other than in Common Stock, or the purchase or redemption of shares of the Corporation other than (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors; and (ii) repurchase of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors; and (iii) any other repurchase or redemption of capital stock of the corporation unanimously approved by the Board of Directors and approved by the holders of the majority of the Common Stock and the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock, voting as separate classes.

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(e) Common Stock. Dividends may be paid on the Common Stock as and when declared by the Board of Directors, subject to the prior dividend rights of the Preferred Stock and Section 6 below.

(f) Non-Cash Distributions. Whenever a distribution provided for in this Section 2 shall be payable in property other than cash, the value of such distribution shall be deemed to be the fair market value of such property as determined in good faith by the Board of Directors.

(g) Consent to Certain Repurchases. As authorized by Section 402.5(c) of the California Corporations Code, Sections 502 and 503 of the California Corporations Code shall not apply with respect to payments made by the Corporation in connection with (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors, and (ii) repurchase of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors, and (iii) any other repurchase or redemption of capital stock of the Corporation unanimously approved by the Board of Directors and approved by the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class.

3. Liquidation Rights.

In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, distribution of the assets of the Corporation legally available for distribution to the Corporation's shareholders shall be made in the following manner:

(a) Series D Liquidation Preference. The holders of the Series D Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series D Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series D Preferred Stock. If the assets of the Corporation legally available for distribution to the holders of the Series D Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(a), then the entire assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series D Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(a).

(b) Series C Liquidation Preference. After payment to the holders of Series D Preferred Stock of the full amounts specified in Section 3(a) above, the holders of the Series C Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock and the Series B Preferred Stock by reason of their ownership of such stock, an amount per share for each

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share of Series C Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series C Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series C Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(b), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series C Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(b).

(c) Series B Liquidation Preference. After the payment to the holders of Series D Preferred Stock and Series C Preferred Stock of the full amounts specified in Sections 3(a) and 3(b) above, the holders of the Series B Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock and the Series A Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series B Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series B Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series B Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(c), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series B Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(c).

(d) Series A Liquidation Preference. After the payment to the holders of Series D Preferred Stock, the holders of Series C Preferred Stock and the holders of Series B Preferred Stock of the full amounts specified in Sections 3(a), 3(b) and 3(c) above, the holders of the Series A Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock by reason of their ownership of such stock, an amount per share for each share of Series A Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series A Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series A Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(d), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series A Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(d).

(e) Remaining Assets. After the payment to the holders of Preferred Stock of the full amounts specified in Sections 3(a), 3(b), 3(c) and 3(d) above, the entire remaining assets of the Corporation legally available for distribution shall be distributed pro-rata to holders of the Common Stock of the Corporation in proportion to the number of shares of Common Stock held by them.

(f) Shares Not Treated as Both Preferred Stock and Common Stock in Any Distribution. Shares of Preferred Stock shall not be entitled to be converted into shares of Common Stock in order to participate in any distribution, or series of distributions, as shares of Common

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Stock, without first foregoing participation in the distribution, or series of distributions, as shares of Preferred Stock.

(g) Reorganization. For purposes of this Section 3, a liquidation, dissolution or winding up of the Corporation shall be deemed to be occasioned by, or to include, (i) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any merger effected exclusively for the purpose of changing the domicile of the Corporation) other than a transaction or series of transactions in which the holders of the voting securities of the Corporation outstanding immediately prior to such transaction or series of transactions continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Corporation held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Corporation or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, transfer, lease or other conveyance of all or substantially all of the assets of the Corporation.

(h) Valuation of Non-Cash Consideration. If any assets of the Corporation distributed to shareholders in connection with any liquidation, dissolution, or winding up of the Corporation are other than cash, then the value of such assets shall be their fair market value as determined in good faith by the Board of Directors, except that any securities to be distributed to shareholders in a liquidation, dissolution, or winding up of the Corporation shall be valued as follows:

(i) If the securities are then traded on a national securities exchange or the Nasdaq Stock Market System (or a similar national quotation system), then the value of the securities shall be deemed to be to the average of the closing prices of the securities on such exchange or system over the ten (10) trading day period ending five (5) trading days prior to the distribution;

(ii) if the securities are actively traded over-the-counter, then the value of the securities shall be deemed to be the average of the closing bid prices of the securities over the ten (10) trading day period ending five (5) trading days prior to the distribution; or

(iii) if there is no active public market for the securities, then the value of the securities shall be deemed to be the fair market value thereof as determined in good faith by the Board of Directors which determination shall include consideration of the illiquidity of the securities.

In the event of a merger or other acquisition of the Corporation by another entity, the distribution date shall be deemed to the date such transaction closes.

For the purposes of this Section 3(h), "**trading day**" shall mean any day on which the exchange or system on which the securities to be distributed are traded is open, and "closing prices" or "closing bid prices" shall be deemed to be: (i) for securities traded primarily on the New York Stock Exchange, the American Stock Exchange or Nasdaq, the last reported trade price or sale price,

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as the case may be, at 4:00 p.m., New York time, on that day and (ii) for securities listed or traded on other exchanges, markets and systems, the market price as of the end of the "regular hours" trading period that is generally accepted as such for such exchange, market or system. If, after the date hereof, the benchmark times generally accepted in the securities industry for determining the market price of a stock as of a given trading day shall change from those set forth above, the fair market value shall be determined as of such other generally accepted benchmark times.

4. Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the "**Conversion Rights** "):

(a) Right to Convert. Subject to Section 4(c), each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share at the office of the Corporation or any transfer agent for the Preferred Stock, into that number of fully-paid, nonassessable shares of Common Stock determined by dividing the Original Issue Price for the relevant series by the Conversion Price for such series. (The number of shares of Common Stock into which each share of Preferred Stock of a series may be converted is hereinafter referred to as the " **Conversion Rate** " for each such series.) Upon any decrease or increase in the Conversion Price for any series of Preferred Stock, as described in this Section 4, the Conversion Rate for such series shall be appropriately increased or decreased.

(b) Automatic Conversion. Each share of Preferred Stock shall automatically be converted into fully-paid, non-assessable shares of Common Stock at the then effective Conversion Rate for such share (i) immediately prior to the closing of a firm commitment underwritten initial public offering on Form S-1 (or successor form) filed under the Securities Act of 1933, as amended (the " **Securities Act** "), covering the offer and sale of the Corporation's Common Stock, provided that the offering price per share is not less than $5.69 (as adjusted for stock splits or stock dividends) and the aggregate gross proceeds to the Corporation are not less than $25,000,000, or (ii) upon the receipt by the Corporation of a written consent or request for such conversion from the holders of two-thirds of the shares of Preferred Stock then outstanding, or, if later, the effective date for conversion specified in such requests (each of the events referred to in (i) and (ii) being hereinafter referred to as an " **Automatic Conversion Event** ").

(c) Mechanics of Conversion. No fractional shares of Common Stock shall be issued upon conversion of Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the then fair market value of a share of Common Stock as determined by the Board of Directors. For such purpose, all shares of Preferred Stock held by each holder of Preferred Stock shall be aggregated, and any resulting fractional share of Common Stock shall be paid in cash. Before any holder of Preferred Stock shall be entitled to convert the same into full shares of Common Stock, and to receive certificates therefor, he shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or of any transfer agent for the Preferred Stock, and shall give written notice to the Corporation at such office that he elects to convert the same; provided , however , that on the date of an Automatic Conversion Event, the outstanding shares of Preferred Stock shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent; provided further , however, that the Corporation shall not be obligated to issue

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certificates evidencing the shares of Common Stock issuable upon such Automatic Conversion Event unless either the certificates evidencing such shares of Preferred Stock are delivered to the Corporation or its transfer agent as provided above, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. On the date of the occurrence of an Automatic Conversion Event, each holder of record of shares of Preferred Stock shall be deemed to be the holder of record of the Common Stock issuable upon such conversion, notwithstanding that the certificates representing such shares of Preferred Stock shall not have been surrendered at the office of the Corporation, that notice from the Corporation shall not have been received by any holder of record of shares of Preferred Stock, or that the certificates evidencing such shares of Common Stock shall not then be actually delivered to such holder.

The Corporation shall, as soon as practicable after such delivery, or after such agreement and indemnification, issue and deliver at such office to such holder of Preferred Stock, a certificate or certificates for the number of shares of Common Stock to which he shall be entitled as aforesaid and a check payable to the holder in the amount of any cash amounts payable as the result of a conversion into fractional shares of Common Stock, plus any declared and unpaid dividends on the converted Preferred Stock. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date; provided, however , that if the conversion is in connection with an underwritten offer of securities registered pursuant to the Securities Act the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing of the sale of securities pursuant to such offering, in which event the person(s) entitled to receive the Common Stock issuable upon such conversion of the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of the sale of such securities.

(d) Adjustments to Conversion Price for Diluting Issues.

(i) Special Definition. For purposes of this Section 4(d), "**Additional Shares of Common**" shall mean all shares of Common Stock issued (or, pursuant to Section 4(d)(iii), deemed to be issued) by the Corporation after the filing of these Articles of Incorporation, other than:

(1) shares of Common Stock issued or issuable upon conversion of shares of Preferred Stock;

(2) shares of Common Stock issued or issuable to officers, directors and employees of, or consultants and other service providers to, the Corporation pursuant to stock grants, option plans, purchase plans or other employee stock incentive programs or arrangements approved by the Board of Directors or upon exercise of options or warrants granted to such parties pursuant to any such plan, program or arrangement;

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(3) shares of Common Stock issued upon the exercise or conversion of Options or Convertible Securities outstanding as of the date of the filing of these Articles of Incorporation;

(4) shares of Common Stock issued or issuable as a dividend or distribution on Preferred Stock or pursuant to any event for which adjustment is made pursuant to Section 4(e), 4(f) or 4(g) hereof;

(5) shares of Common Stock issued in a registered public offering under the Securities Act pursuant to which all outstanding shares of Preferred Stock are automatically converted into Common Stock pursuant to an Automatic Conversion Event;

(6) shares of Common Stock issued or issuable pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided, that such issuances are unanimously approved by the Board of Directors;

(7) shares of Common Stock issued or issuable to banks, equipment lessors or other financial institutions pursuant to a commercial leasing or debt financing transaction approved by the Board of Directors;

(8) shares of Common Stock issued or issuable in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements, or strategic partnerships or relationships, if the issuance is approved by the Board of Directors; and

(9) shares of Common Stock issued or issuable upon conversion of up to $5 million in aggregate principal amount (plus interest) of convertible promissory notes originally issued or issuable to Biomedical Sciences Investment Fund Pte Ltd. or its affiliates and upon conversion of up to $3 million in aggregate principal amount (plus interest) of convertible promissory notes originally issued or issuable to Invus, L.P. or its affiliates.

(ii) No Adjustment of Conversion Price. No adjustment in the Conversion Price of a particular series of Preferred Stock shall be made in respect of the issuance of Additional Shares of Common unless the consideration per share (as determined pursuant to Section 4(d)(vi)) for an Additional Share of Common issued or deemed to be issued by the Corporation is less than the Conversion Price in effect on the date of, and immediately prior to such issue, for such series of Preferred Stock.

(iii) Deemed Issue of Additional Shares of Common. In the event the Corporation at any time or from time to time after the date of the filing of these Articles of Incorporation shall issue any Options or Convertible Securities or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein for a subsequent adjustment of such number) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible

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Securities, the conversion or exchange of such Convertible Securities or, in the case of Options for Convertible Securities, the exercise of such Options and the conversion or exchange of the underlying securities, shall be deemed to have been issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that in any such case in which shares are deemed to be issued:

(1) no further adjustment in the Conversion Price of the Preferred Stock shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock in connection with the exercise of such Options or conversion or exchange of such Convertible Securities;

(2) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any increase in the consideration payable to the Corporation, or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price of the Preferred Stock computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities;

(3) no readjustment pursuant to clause (2) above shall have the effect of increasing the Conversion Price of the Preferred Stock to an amount which exceeds the lower of (i) the Conversion Price of the Preferred Stock on the original adjustment date, or (ii) the Conversion Price of the Preferred Stock that would have resulted from any issuance of Additional Shares of Common between the original adjustment date and such readjustment date;

(4) upon the expiration of any such Options or any rights of conversion or exchange under such Convertible Securities which shall not have been exercised, the Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto) and any subsequent adjustments based thereon shall, upon such expiration, be recomputed as if:

(A) in the case of Convertible Securities or Options for Common Stock, the only Additional Shares of Common issued were the shares of Common Stock, if any, actually issued upon the exercise of such Options or the conversion or exchange of such Convertible Securities and the consideration received therefor was the consideration actually received by the Corporation for the issue of such exercised Options plus the consideration actually received by the Corporation upon such exercise or for the issue of all such Convertible Securities which were actually converted or exchanged, plus the additional consideration, if any, actually received by the Corporation upon such conversion or exchange, and

(B) in the case of Options for Convertible Securities, only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such Options, and the consideration received by the Corporation for the Additional Shares of Common deemed to have been then issued was the consideration actually received by the Corporation for the issue of such exercised Options, plus the consideration deemed to have been

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received by the Corporation (determined pursuant to Section 4(d)(v)) upon the issue of the Convertible Securities with respect to which such Options were actually exercised; and

(5) if such record date shall have been fixed and such Options or Convertible Securities are not issued on the date fixed therefor, the adjustment previously made in the Conversion Price which became effective on such record date shall be canceled as of the close of business on such record date, and thereafter the Conversion Price shall be adjusted pursuant to this Section 4(d)(iii) as of the actual date of their issuance.

(iv) Adjustment of Conversion Price of Series D Preferred Stock Upon Issuance of Additional Shares of Common.

(1) For so long as the Conversion Price of the Series D Preferred Stock is greater than $2.58 (as adjusted for subdivisions and combinations of the Common Stock and changes in the Common Stock as set forth in Sections 4(e) and 4(g)) (the " **Series D Ratchet Amount** "), in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) for a consideration per share less than the applicable Conversion Price of the Series D Preferred Stock in effect on the date of and immediately prior to such issue, but for a consideration per share equal to or greater than the Series D Ratchet Amount, then, the Conversion Price of the Series D Preferred Stock shall be reduced concurrently with such issue to a price (calculated to the nearest cent) equal to the per share price of the Additional Shares of Common.

(2) In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) without consideration or for a consideration per share less than the Series D Ratchet Amount, then, the Conversion Price of the Series D Preferred Stock immediately prior to such issue shall be deemed to be equal to the Series D Ratchet Amount (the " **Adjusted Conversion Price** ") and such Adjusted Conversion Price shall be further reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Adjusted Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Adjusted Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 4(d)(iv)(2), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 4(d)(iii) hereof, shall be deemed to be outstanding. Section 4(d)(iv)(3) shall govern adjustments to the Conversion Price of the Series D Preferred Stock after the first adjustment to the Conversion Price of the Series D Preferred Stock pursuant to this Section 4(d)(iv)(2).

(3) After any adjustment to the Conversion Price of the Series D Preferred Stock pursuant to Section 4(d)(iv)(2), in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to

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Section 4(d)(iii)) without consideration or for a consideration per share less than Conversion Price of the Series D Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series D Preferred Stock shall be reduced concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 4(d)(iv)(3), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 4(d)(iii) hereof, shall be deemed to be outstanding.

(v) Adjustment of Conversion Price of Series A, B and C Preferred Stock. In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) without consideration or for a consideration per share less than the applicable Conversion Price of the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock (if affected) shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 4(d)(v), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 4(d)(iii) hereof, shall be deemed to be outstanding.

(vi) Determination of Consideration. For purposes of this Section 4(d), the consideration received by the Corporation for the issue (or deemed issue) of any Additional Shares of Common shall be computed as follows:

(1) Cash and Property. Such consideration shall:

(A) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation before deducting reasonable discounts, commissions or other expenses allowed, paid or incurred by the Corporation for any underwriting or otherwise in connection with such issue (or deemed issue);

(B) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

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(C) in the event Additional Shares of Common are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (A) and (B) above, as reasonably determined in good faith by the Board of Directors.

(2) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common deemed to have been issued pursuant to Section 4(d)(iii) shall be determined by dividing

(X) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities by

(Y) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities.

(e) Adjustments for Subdivisions or Combinations of Common Stock. In the event the outstanding shares of Common Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Common Stock, the Conversion Price of each series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Common Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Common Stock, the Conversion Prices in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(f) Adjustments for Subdivisions or Combinations of Preferred Stock. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

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(g) Adjustments for Reclassification, Exchange and Substitution. Subject to Section 3 above ("**Liquidation Rights** "), if the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for above), then, in any such event, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive, each holder of such Preferred Stock shall have the right thereafter to convert such shares of Preferred Stock into a number of shares of such other class or classes of stock which a holder of the number of shares of Common Stock deliverable upon conversion of such series of Preferred Stock immediately before that change would have been entitled to receive in such reorganization or reclassification, all subject to further adjustment as provided herein with respect to such other shares.

(h) No Impairment. The Corporation will not through any reorganization, transfer of assets, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation but will at all times in good faith assist in the carrying out of all the provisions of this Section 4 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of Preferred Stock against impairment. Notwithstanding the foregoing, nothing in this Section 4(h) shall prohibit the Corporation from amending its Articles of Incorporation with the requisite consent of its shareholders and the board of directors.

(i) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 4, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of Preferred Stock.

(j) Notices of Record Date. In the event that this Corporation shall propose at any time:

(i) to declare any dividend or distribution upon its Common Stock, whether in cash, property, stock or other securities, whether or not a regular cash dividend and whether or not out of earnings or earned surplus;

(ii) to effect any reclassification or recapitalization of its Common Stock outstanding involving a change in the Common Stock; or

(iii) to voluntarily liquidate or dissolve or to enter into any transaction deemed to be a liquidation, dissolution or winding up of the corporation pursuant to Section 3(f);

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then, in connection with each such event, this Corporation shall send to the holders of the Preferred Stock at least 14 days' prior written notice of the date on which a record shall be taken for such dividend or distribution (and specifying the date on which the holders of Common Stock shall be entitled thereto) or for determining rights to vote in respect of the matters referred to in (ii) and (iii) above.

Each such written notice shall be given by first class mail, postage prepaid, addressed to the holders of Preferred Stock at the address for each such holder as shown on the books of this Corporation.

The right of the holders of the Preferred Stock to notice hereunder may be waived, either prospectively or retroactively and either generally or in a particular instance, by the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class.

(k) Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

(l) Waiver of Adjustment of Conversion Price. Notwithstanding anything herein to the contrary, any downward adjustment of the Conversion Price of any series of Preferred Stock may be waived, either prospectively or retroactively and either generally or in a particular instance, by the consent or vote of the holders of more than two-thirds (2/3) of the outstanding shares of such series. Any such waiver shall bind all future holders of shares of such series of Preferred Stock.

5. Voting.

(a) Restricted Class Voting. Except as otherwise expressly provided herein or as required by law, the holders of Preferred Stock and the holders of Common Stock shall vote together and not as separate classes.

(b) No Series Voting. Other than as provided herein or required by law, there shall be no series voting.

(c) Preferred Stock. Each holder of Preferred Stock shall be entitled to the number of votes equal to the number of shares of Common Stock into which the shares of Preferred Stock held by such holder could be converted as of the record date. The holders of shares of the Preferred Stock shall be entitled to vote on all matters on which the Common Stock shall be entitled to vote. Holders of Preferred Stock shall be entitled to notice of any shareholders' meeting in accordance with the Bylaws of the Corporation. Fractional votes shall not, however, be permitted

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and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted), shall be disregarded.

(d) Common Stock. Each holder of shares of Common Stock shall be entitled to one vote for each share thereof held.

(e) Election of Directors. So long as at least 2,000,000 shares of Series D Preferred Stock (as adjusted for stock splits, subdivisions, combinations or stock dividends with respect to such shares) remain outstanding, the holders of the Series D Preferred Stock, voting as a separate class, shall be entitled to elect one (1) member of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's shareholders for the election of directors. So long as at least 2,000,000 shares of Series C Preferred Stock (as adjusted for stock splits, subdivisions, combinations or stock dividends with respect to such shares) remain outstanding, the holders of Series C Preferred Stock, voting as a separate class, shall be entitled to elect three (3) members of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's shareholders for the election of directors. Any additional members of the Corporation's Board of Directors shall be elected by the holders of Common Stock, Series A Preferred Stock and Series B Preferred Stock, voting together as a single class.

6. Amendments and Changes Requiring Approval of Preferred Stock. As long as any of the Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class:

(a) amend, alter or repeal any provision of the Articles of Incorporation or By-laws of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Preferred Stock or any series thereof;

(b) enter into any transaction or series of related transactions deemed to be a liquidation, dissolution or winding up of the Corporation pursuant to Section 3(f) above;

(c) voluntarily liquidate or dissolve;

(d) declare or pay any distribution (as defined in Section 2(d)) with respect to the Common Stock of the Corporation;

(e) permit any subsidiary of the Corporation to sell securities to a third party (other than directors' qualifying shares in the case of subsidiaries outside the United States);

(f) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Preferred Stock;

(g) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, liquidation, redemption, conversion or other rights senior to or on a parity with any series of Preferred Stock or with respect to voting senior to any series of Preferred Stock;

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(h) increase or decrease the authorized number of directors of the Corporation; or

(i) amend this Section 6.

7. Amendments and Changes Requiring the Approval of the Series D Preferred Stock.

(a) As long as any of the Series D Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of 60% of the outstanding shares of the Series D Preferred Stock:

(i) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series D Preferred Stock in a manner different from any other series of Preferred Stock; or

(ii) amend this Section 7(a).

(b) As long as any of the Series D Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of a majority of the outstanding shares of the Series D Preferred Stock:

(i) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series D Preferred Stock;

(ii) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series D Preferred Stock or with respect to voting senior to the Series D Preferred Stock;

(iii) declare or pay any distribution (as defined in Section 2(d)) with respect to the Common Stock or Preferred Stock of the Corporation;

(iv) increase the authorized number of directors of the Corporation above eleven (11); or

(v) amend this Section 7(b).

8. Amendments and Changes Requiring the Approval of the Series C Preferred Stock. As long as any of the Series C Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of two-thirds of the outstanding shares of the Series C Preferred Stock:

(a) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or

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restrictions provided for the benefit of the Series C Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series C Preferred Stock;

(c) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series C Preferred Stock or with respect to voting senior to the Series C Preferred Stock;

(d) declare or pay any distribution (as defined in Section 2(c)) with respect to the Common Stock or Preferred Stock of the Corporation;

(e) increase the authorized number of directors of the Corporation above eleven (11); or

(f) amend this Section 8.

9. Amendments and Changes Requiring the Approval of the Series B Preferred Stock. As long as any of the Series B Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of two-thirds of the outstanding shares of the Series B Preferred Stock:

(a) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series B Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series B Preferred Stock; or

(c) amend this Section 9.

10. Status of Converted Stock. In the event any shares of Preferred Stock shall be converted pursuant to Article 4 hereof, then the shares so converted shall be cancelled and shall not be issuable by the Corporation. The Articles of Incorporation shall be appropriately amended to effect the corresponding reduction in the Corporation's authorized capital stock.

11. Notices. Any notice required by the provisions of this Article IV to be given to the holders of Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at such holder's address appearing on the books of the Corporation.

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ARTICLE V

1. Limitation of Directors' Liability. The liability of the directors of this Corporation for monetary damages shall be eliminated to the fullest extent permissible under California law.

2. Indemnification of Corporate Agents. This Corporation is authorized to provide indemnification of agents (as defined in Section 317 of the California Corporations Code) through bylaw provisions, agreements with agents, votes of shareholders or disinterested directors or otherwise, in excess of the indemnification otherwise permitted by Section 317 of the California Corporations Code, subject only to the applicable limits set forth in Section 204 of the California Corporations Code with respect to actions for breach of duty to this Corporation and its shareholders.

3. Repeal or Modification. Any repeal or modification of the foregoing provisions of this Article V shall not adversely affect any right of indemnification or limitation of liability permitted under California law relating to acts or omissions occurring prior to such repeal or modification.

(THE GREAT SEAL OF THE STATE OF CALIFORNIA - OFFICE OF THE SECRETARY OF STATE)

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EXHIBIT B

Form of New License Agreement

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

[***] Indicates text has been omitted from this Exhibit pursuant to a confidential treatment request and has been filed separately with the Securities and Exchange Commission.

8805. LICI.001
UAB Research Foundation

LICENSE AGREEMENT

THIS LICENSE AGREEMENT (this "Agreement") dated as of March 7, 2003 (the "Effective Date"), is entered into between The UAB Research Foundation, an Alabama not for profit organization ("UABRF"), having a place of business at 1120G Administration Building, 704 20th Street, Birmingham, Alabama 35294, and Fluidigm Corporation, a California corporation ("Fluidigm"), having a place of business at 7100 Shoreline Court, South San Francisco, California 94080.

WHEREAS, UABRF owns or has rights in certain technology regarding nanovolume crystallization arrays.

WHEREAS, UABRF and Oculus Pharmaceuticals, Inc. ("Oculus") have entered into that certain License Agreement dated as of September 21, 2001 ("Oculus Agreement") pursuant to which UABRF has granted to Oculus an exclusive license to the Oculus Agreement Technology (as defined below), on the terms and conditions of the Oculus Agreement.

WHEREAS, UABRF and Oculus have terminated the Oculus Agreement effective as of January 30, 2003.

WHEREAS, UABRF has licensed to Diversified Scientific, Inc. ("DSI") rights in certain other technology, which certain technology is identified in the attached Exhibit A ("UABRF/DSI Technology").

WHEREAS, DSI is performing certain research pursuant to one or more grants, existing as of December 19, 2002, between UAB (as defined below) and DSI under Defense Small Business Innovation Research Program.

WHEREAS, Fluidigm desires to obtain an exclusive worldwide license under the Licensed IP Rights (as defined below), on the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants herein contained, the parties agree as follows:

1. DEFINITIONS

1.1 "Affiliate" shall mean, with respect to any Person, any other Person which directly or indirectly controls, is controlled by, or is under common control with, such Person. A Person shall be regarded as in control of another Person if it owns, or directly or indirectly controls, at least forty percent (40%) of the voting stock or other ownership interest of the other Person, or if it directly or indirectly possesses the power to direct or cause the direction of the management and policies of the other Person by any means whatsoever.

1.2 "Confidential Information" shall mean, with respect to a party, all information of any kind whatsoever, and all tangible and intangible embodiments thereof of any

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kind whatsoever, which is disclosed by such party to the other party and is marked, identified as or otherwise acknowledged to be confidential at the time of disclosure to the other party. Notwithstanding the foregoing, Confidential Information of a party shall not include information which the other party can establish by written documentation (a) to have been publicly known prior to disclosure of such information by the disclosing party to the other party, (b) to have become publicly known, without fault on the part of the other party, subsequent to disclosure of such information by the disclosing party to the other party, (c) to have been received by the other party at any time from a source, other than the disclosing party, rightfully having possession of and the right to disclose such information, (d) to have been otherwise known by the other party prior to disclosure of such information by the disclosing party to the other party, or (e) to have been independently developed by employees or agents of the other party without access to or use of such information disclosed by the disclosing party to the other party.

1.3 "Fluidigm Series C Preferred Stock" shall have the meaning set forth in Section 1.9 of the Master Closing Agreement.

1.4 "Licensed IP Rights" shall mean, collectively, the Licensed Patent Rights and the Licensed Know-How Rights.

1.5 "Licensed Know-How Rights" shall mean all trade secret and other know-how rights in all information and data disclosed on or before the Effective Date that (i) is not generally known (including, but not limited to, information and data regarding formulae, procedures, protocols, techniques and results of experimentation and testing), (ii) is developed by Dr. Larry DeLucas in his capacity as a UAB faculty member or by UAB personnel under the scientific direction and scientific supervision of Dr. Larry DeLucas, and (iii) is necessary or useful for Fluidigm to research, develop, make, use, sell or seek regulatory approval to market a composition, or to practice any method or process, at any time (a) comprising the Oculus Agreement Technology or (b) claimed or covered by in any issued patent or pending patent application within the Licensed Patent Rights.

1.6 "Licensed Patent Rights" shall mean (a) those certain patent applications and patents listed on Exhibit B hereto; (b) all patent applications heretofore or hereafter filed or having legal force in any country which claim any Oculus Agreement Technology; (c) all patents that have issued or in the future issue from the patent applications described in clauses (a) and (b) of this Section 1.6, including utility, model and design patents and certificates of invention; and (d) all divisionals, continuations, continuations-in-part, reissues, renewals, extensions or additions to any such patent applications and patents.

1.7 "Master Closing Agreement" shall mean a Master Closing Agreement between Fluidigm, UABRF and Oculus of even date hereof.

1.8 "NanoScreen Patent Rights" shall mean (a) those certain patent applications and patents listed on Exhibit B hereto; (b) all patents that have issued or in the future issue from any such patent applications, including utility, model and design patents and certificates of invention; and (c) all divisionals, continuations, continuations-in-part, reissues, renewals, extensions or additions to any such patent applications and patents.

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1.9 "Oculus Agreement Technology" shall mean collectively, the technology, processes, inventions, trade secrets, know-how and other proprietary property described in Exhibit C hereto.

1.10 "Person" shall mean an individual, corporation, partnership, limited liability company, trust, business trust, association, joint stock company, joint venture, pool, syndicate, sole proprietorship, unincorporated organization, governmental authority or any other form of entity not specifically listed herein.

1.11 "Third Party" shall mean any Person other than UABRF, Fluidigm and their respective Affiliates.

1.12 "UAB" shall mean the University of Alabama at Birmingham.

1.13 "UABRF/DSI License Agreements" shall mean, collectively, [***].

1.14 "UAB Related Entities" shall mean and include UAB, UABRF, University Hospital, The University of Alabama Health Services Foundation ("UAHSF"), Southern Research Institute and all other entities within the UAB Medical Center, which are under the control of the Board of Trustees of The University of Alabama or are associated with said Board of Trustees through an affiliation agreement.

2. REPRESENTATIONS AND WARRANTIES

2.1 Mutual Representations and Warranties Each party hereby represents and warrants to the other party as follows:

2.1.1 Corporate Existence. Such party is a corporation duly organized, validly existing and in good standing under the laws of the state in which it is incorporated.

2.1.2 Authorization and Enforcement of Obligations. Such party (a) has the corporate power and authority and the legal right to enter into this Agreement and to perform its obligations hereunder, and (b) has taken all necessary corporate action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder. This Agreement has been duly executed and delivered on behalf of such party, and constitutes a legal, valid, binding obligation, enforceable against such party in accordance with its terms.

2.1.3 No Consents. All necessary consents, approvals and authorizations of all governmental authorities and other Persons required to be obtained by such party in connection with this Agreement have been obtained.

2.1.4 No Conflict. The execution and delivery of this Agreement and the performance of such party's obligations hereunder (a) do not conflict with or violate any

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requirement of applicable laws or regulations, and (b) do not conflict with, or constitute a default under, any contractual obligation of it.

2.2 UABRF Representations and Warranties. UABRF represents and warrants to Fluidigm as follows:

2.2.1 Ownership. UABRF is the sole owner of the Licensed IP Rights (other than those listed under Item No. 3 of Exhibit B), and as of the Effective Date has no knowledge of any Third Party having any license or other interest in such Licensed IP Rights. UABRF shall use its commercially reasonable efforts to provide Fluidigm with (a) evidence of UABRF's sole ownership of those Licensed IP Rights listed under Item No. 3 of Exhibit B , and (b) a letter from DSI to Fluidigm stating that DSI has no license or other interest in NanoScreen Patent Rights except to the extent necessary for DSI to perform its research obligations pursuant to the SBIR Grants (as defined below).

2.2.2 No Injunction. No action, suit or proceeding before any court or government body is instituted (or is pending) by any government authority or any other Person to restrain or prohibit this Agreement or the consummation of the transactions contemplated hereby. No preliminary or permanent injunction or other order issued by any federal or state court of competent jurisdiction preventing this Agreement or the consummation of the transactions contemplated hereby is in effect.

2.2.3 No Infringement. As of the Effective Date, UABRF and Dr. Larry DeLucas (a) are not aware of any Third Party patent, patent application or other intellectual property rights that would be infringed by practicing any process or method or by making, using or selling any composition which is claimed or disclosed in the Licensed Patent Rights or which constitutes Licensed Know-How Rights; (b) are not aware of any infringement or misappropriation by a Third Party of the Licensed IP Rights; and (c) are not aware of any license or other right granted to DSI or any other Third Party under the NanoScreen Patent Rights. Provided however, UABRF has disclosed to Fluidigm the potential infringement by DSI of the Licensed IP Rights to the extent necessary for DSI to perform its research obligations pursuant to one or more grants (the "SBIR Grants"), existing as of December 19, 2002, between UAB and DSI under the Defense Small Business Innovation Research (SBIR) Program, with the understanding that neither DSI nor any other third party would have the right to commercialize any results of such SBIR grants that would infringe the Licensed IP Rights without first obtaining a license from Fluidigm under the Licensed IP Rights. Not later than ten (10) days following the Effective Date, UABRF shall provide Fluidigm with copies of all documents and instruments relating to such SBIR Grants.

3. LICENSE GRANT

3.1 Licensed IP Rights. UABRF hereby grants to Fluidigm an exclusive, perpetual, irrevocable, royalty-free, worldwide license (including the right to grant sublicenses) under the Licensed IP Rights. The license grant under the Licensed IP Rights (other than the NanoScreen Patent Rights) is subject to the licenses previously and expressly granted by UABRF to DSI pursuant to the UABRF/DSI License Agreements regarding the UABRF/DSI Technology only to the extent necessary for DSI to exercise its license rights under the

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UABRF/DSI Technology granted thereunder. The license grant under the NanoScreen Patent Rights is not subject to any previously granted licenses other than those certain rights which may have been granted to DSI to the extent necessary for DSI to perform its research obligations pursuant to the SBIR Grants. To the extent any of the rights, title and interest in and to the Licensed IP Rights can be neither assigned nor licensed by UABRF to Fluidigm without (a) the consent of, or (b) breach by UABRF of any agreement with, any Third Party, UABRF hereby irrevocably waives and agrees never to assert such non-assignable and non-licensable rights, title and interest against Fluidigm or any of Fluidigm's successors in interest to such non-assignable and non-licensable rights during the term of this Agreement.

3.2 Sublicenses. Fluidigm shall not sublicense the Licensed IP Rights prior to the first (1st) anniversary of the Effective Date except in connection with settlement of any action or claim relating to the technology that is the subject of the Licensed IP Rights. Fluidigm shall give UABRF prompt written notice of each sublicense under this Agreement. Each sublicense shall be subject to the terms and conditions of this Agreement.

3.3 Availability of the Licensed IP Rights. UABRF shall provide Fluidigm with all information available to UABRF regarding the Licensed IP Rights.

3.4 Reservation of Rights.

3.4.1 Research Use. UABRF hereby retains the right to, and this Agreement shall not limit UABRF's ability to, utilize the Licensed IP Rights for internal research, academic and educational purposes at UAB, UAB Related Entities and academic institution collaborators of UAB, for patient care at UAB and UAB Related Entities, and/or for the performance of services for for-profit or not-for-profit institutions.

3.4.2 Obligations to U.S. Government. UABRF agrees that during the term of this Agreement UABRF shall not use the Licensed IP Rights in any manner except for internal research, academic and educational purposes at UAB, UAB Related Entities and academic institution collaborators of UAB, for patient care at UAB and UAB Related Entities, and/or for the performance of services for for-profit or not-for-profit institutions as provided in Section 3.4.1 above and as may be necessary or appropriate to fulfill the obligations of UABRF or UAB under the National Institutes of Health ("NIH") grant used to fund the research resulting in the development of certain portion of the Licensed IP Rights. In determining the actions required under such grant, UABRF shall consult with Fluidigm and keep Fluidigm informed, but UABRF shall have the ultimate right to determine the necessary and appropriate actions relative thereto. UABRF's rights to the Licensed IP Rights for use in fulfilling UAB's obligations under the NIH grant shall only relate to those portions of the Licensed IP Rights funded by such NIH grant.

3.5 Non-Assertion Covenant. To the extent the research activities of DSI conducted in accordance with the SBIR Grants infringe the rights granted to Fluidigm under this Section 3, Fluidigm agrees not to assert such rights against DSI. Fluidigm agrees not to assert against DSI such rights only to the extent expressly stated herein. No license or other right by Fluidigm in favor of DSI shall be created hereunder by implication, estoppel or otherwise.

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4. LICENSE ISSUE FEE

Within thirty (30) days after the Effective Date Fluidigm shall (a) pay UABRF the sum in cash of [***] and (b) issue to UABRF such number of Fluidigm Series C Preferred Stock as provided in Section 2.3 of the Master Closing Agreement.

5. RESEARCH AND DEVELOPMENT OBLIGATIONS

5.1 Research and Development Efforts. Fluidigm shall use commercially reasonable efforts to research, develop and commercialize the Licensed IP Rights as Fluidigm determines commercially feasible. Appendix 1 of the Sponsored Research Agreement sets forth the components of Fluidigm's Topaz System which Fluidigm plans to release commercially.

5.2 Records. Fluidigm shall maintain records, in sufficient detail and in good scientific manner, which shall reflect all work done and results achieved in the performance of its research and development regarding the Licensed IP Rights (including all data in the form required under all applicable laws and regulations).

5.3 Reports. Within ninety (90) days following the end of each calendar year during the term of this Agreement, Fluidigm shall prepare and deliver to UABRF a written summary report which shall describe the research and development of the Licensed IP Rights during such year.

6. CONFIDENTIALITY

6.1 Confidential Information. During the term of this Agreement, and for a period of five (5) years following the expiration or earlier termination hereof, each party shall maintain in confidence all Confidential Information disclosed by the other party, and shall not use, disclose or grant the use of the Confidential Information except on a need-to-know basis to those directors, officers, employees, consultants, clinical investigators, contractors, (sub)licensees, distributors or permitted assignees, to the extent such disclosure is reasonably necessary in connection with such party's activities as expressly authorized by this Agreement. To the extent that disclosure is authorized by this Agreement, prior to disclosure, each party hereto shall obtain agreement of any such person or entity to hold in confidence and not make use of the Confidential Information for any purpose other than those permitted by this Agreement. Each party shall notify the other promptly upon discovery of any unauthorized use or disclosure of the other party's Confidential Information.

6.2 Terms of this Agreement. Except as otherwise provided in Section 6.1 or 6.3, neither party shall disclose any terms or conditions of this Agreement to any third party without the prior consent of the other party. Notwithstanding the foregoing, prior to execution of this Agreement, the parties have agreed upon the substance of information that can be used to describe the terms of this transaction, and each party may disclose such information, as modified by mutual agreement from time to time, without the other party's consent.

6.3 Permitted Disclosures. The confidentiality obligations contained in this Section 6 shall not apply to the extent that the receiving party (the "Recipient") is required (a) to disclose information by law, order or regulation of a governmental agency or a court of

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competent jurisdiction, or (b) to disclose information to any governmental agency for purposes of obtaining approval to test or market a product, provided in either case that the Recipient shall provide written notice thereof to the other party and sufficient opportunity to object to any such disclosure or to request confidential treatment thereof.

7. PATENTS

7.1 Prosecution and Maintenance. Fluidigm shall be responsible for and shall control, at its sole cost, the preparation, filing, prosecution, defense (including without limitation prosecution, defense and settlement of any interference or opposition) and maintenance of the Licensed Patent Rights. Fluidigm shall give UABRF an opportunity to review and comment on the text of each patent application within the Licensed Patent Rights before filing, and shall provide UABRF with a copy of such patent application as filed, together with notice of its filing date and serial number. UABRF shall cooperate with Fluidigm, execute all lawful papers and instruments and make all rightful oaths and declarations as may be necessary in the preparation, prosecution and maintenance of the Licensed Patent Rights.

Enforcement.

7.2.1 Each party shall notify the other party of any infringement known to such party of any Licensed Patent Rights and shall provide the other party with the available evidence, if any, of such infringement.

7.2.2 Fluidigm, at its sole expense, shall have the right to determine the appropriate course of action to enforce the Licensed Patent Rights or otherwise abate the infringement thereof, to take (or refrain from taking) appropriate action to enforce the Licensed Patent Rights, to control any litigation or other enforcement action and to enter into, or permit, the settlement of any such litigation or other enforcement action with respect to the Licensed Patent Rights, and shall consider, in good faith, the interests of UABRF in so doing. UABRF shall cooperate with Fluidigm in the execution of any action to enforce the Licensed Patent Rights. Fluidigm shall retain all monies recovered upon the final judgment or settlement of any such suit to enforce the Licensed Patent Rights.

8. TERMINATION

8.1 Expiration. Subject to the provisions of Section 8.2 below, this Agreement shall expire on the expiration of the last to expire of the Licensed Patent Rights. Upon expiration of this Agreement under this Section 8.1, Fluidigm shall have a paid-up, exclusive, worldwide license under the Licensed Know-How Rights.

8.2 Termination by Fluidigm. Fluidigm may terminate this Agreement, in its sole discretion, upon thirty (30) days prior written notice to UABRF. Upon termination of this Agreement by Fluidigm under this Section 8.2, Fluidigm shall have a paid-up, non-exclusive, worldwide license under the Licensed Know-How Rights.

Effect of Expiration or Termination. Expiration or termination of this Agreement shall not relieve the parties of any obligation accruing prior to such expiration or termination, and the provisions of Sections 6, 7 and 9 shall survive the expiration or termination

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of this Agreement. Except as the parties otherwise agree in writing, termination of this Agreement shall not affect the Master Closing Agreement.

9. INDEMNIFICATION

9.1 Indemnification. Fluidigm shall defend, indemnify and hold the UABRF harmless from all losses, liabilities, damages and expenses (including reasonable attorneys' fees and costs) resulting from any claims, demands, actions and other proceedings by any Third Party to the extent resulting from Fluidigm's use of the Licensed IP Rights under this Agreement.

9.2 Procedure. UABRF promptly shall notify Fluidigm of any claim, demand, action or other proceeding for which UABRF intends to claim indemnification. Fluidigm shall have the right to participate in, and to the extent Fluidigm so desires jointly with any other indemnitor similarly noticed, to assume the defense thereof with counsel selected by Fluidigm; provided, however, that UABRF shall have the right to retain its own counsel, with the fees and expenses to be paid by UABRF, if representation of UABRF by the counsel retained by Fluidigm would be inappropriate due to actual or potential differing interests between UABRF and any other party represented by such counsel in such proceedings. The indemnity obligations under this Section 9 shall not apply to amounts paid in settlement of any claim, demand, action or other proceeding if such settlement is effected without the prior express written consent of Fluidigm, which consent shall not be unreasonably withheld or delayed. The failure to deliver notice to Fluidigm within a reasonable time after notice of any such claim or demand, or the commencement of any such action or other proceeding, if prejudicial to its ability to defend such claim, demand, action or other proceeding, shall relieve such Indemnitor of any liability to UABRF under this Section 9 with respect thereto, but the omission so to deliver notice to Fluidigm shall not relieve it of any liability that it may have to UABRF other than under this Section 9. Fluidigm may not settle or otherwise consent to an adverse judgment in any such claim, demand, action or other proceeding, that diminishes the rights or interests of UABRF without the prior express written consent of UABRF, which consent shall not be unreasonably withheld or delayed. UABRF, its employees and agents, shall reasonably cooperate with Fluidigm and its legal representatives in the investigation of any claim, demand, action or other proceeding covered by this Section 9.

9.3 Insurance. Fluidigm shall maintain insurance with respect to the research, development and commercialization of products by Fluidigm pursuant to this Agreement in such amount as Fluidigm customarily maintains with respect to the research, development and commercialization of its similar products. Fluidigm shall maintain such insurance for so long as it continues to research, develop or commercialize any products pursuant to this Agreement, and thereafter for so long as Fluidigm customarily maintains insurance covering the research, development or commercialization of its similar products.

10. MISCELLANEOUS

10.1 Notices. Any consent, notice or report required or permitted to be given or made under this Agreement by one of the parties to the other shall be in writing and addressed to such other party at its address indicated below, or to such other address as the addressee shall

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have last furnished in writing to the addressor, and shall be effective upon receipt by the addressee.

If to UABRF:	UAB Research Foundation 1120G Administration Building 704 20th Street Birmingham, Alabama 35294 Attention: Director
If to Fluidigm:	Fluidigm Corporation 7100 Shoreline Court South San Francisco, California 94080 Attention: President
with a copy to:	Fluidigm Corporation 7100 Shoreline Court South San Francisco, California 94080 Attention: General Counsel

10.2 Assignment. Except as otherwise expressly provided under this Agreement neither this Agreement nor any right or obligation hereunder may be assigned or otherwise transferred (whether voluntarily, by operation of law or otherwise), without the prior express written consent of the other party; provided, however, that either party may, without such consent, assign this Agreement and its rights and obligations hereunder in connection with the transfer or sale of all or substantially all of its business, or in the event of its merger, consolidation, change in control or similar transaction. Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment or transfer in violation of this Section 10.2 shall be void.

10.3 Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Alabama, without regard to the conflicts of law principles thereof.

10.4 Entire Agreement. This Agreement and the Master Closing Agreement (together with the Ancillary Agreements, as defined in the Master Closing Agreement) contain the entire understanding of the parties with respect to the subject matter hereof. All express or implied representations, agreements and understandings, either oral or written, heretofore made are expressly superseded by this Agreement and the Master Closing Agreement. To the extent that any provision of this Agreement conflicts with any provision of the Sponsored Research Agreement between the parties of even date hereof ("Sponsored Research Agreement"), the applicable provision of this Agreement shall control and supersede the applicable provision of the Sponsored Research Agreement.

10.5 Independent Contractors. Each party hereby acknowledges that the parties shall be independent contractors and that the relationship between the parties shall not constitute a partnership, joint venture or agency. Neither party shall have the authority to make any

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statements, representations or commitments of any kind, or to take any action, which shall be binding on the other party, without the prior consent of the other party to do so.

10.6 Waiver. The waiver by a party of any right hereunder, or of any failure to perform or breach by the other party hereunder, shall not be deemed a waiver of any other right hereunder or of any other breach or failure by the other party hereunder whether of a similar nature or otherwise.

10.7 Force Majeure. Neither party shall be held liable or responsible to the other party nor be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any term of this Agreement to the extent, and for so long as, such failure or delay is caused by or results from causes beyond the reasonable control of the affected party including but not limited to fire, floods, embargoes, war, acts of war (whether war be declared or not), insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, acts of God or acts, omissions or delays in acting by any governmental authority or the other party.

10.8 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

UAB RESEARCH FOUNDATION

By /s/ (ILLEGIBLE)

Title Director

FLUIDIGM CORPORATION

By /s/ Gajus Worthington

Title President & CEO

Acknowledged and agreed to
this March 7, 2003.

/s/ Dr. Larry DeLucas
Dr. Larry DeLucas

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EXHIBIT A

UABRF/DSI TECHNOLOGY

[***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT B

PATENT RIGHTS

1. [***]
2. [***]
3. [***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

4. [***]

5. [***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT C

OCULUS AGREEMENT TECHNOLOGY

1. [***]
2. [***]
3. Copies of all documentation describing the foregoing, in particular, drawings, operations manuals.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT C

Form of Sponsored Research Agreement

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

FORM OF
SPONSORED RESEARCH AGREEMENT

THIS SPONSORED RESEARCH AGREEMENT (this "Agreement") dated as of March , 2003 (the "Effective Date"), is entered into between The UAB Research Foundation, an Alabama not for profit organization (the "UABRF"), having a place of business at 1120G Administration Building, 704 20th Street, Birmingham, Alabama 35294, and Fluidigm Corporation, a California corporation ("Fluidigm"), having a place of business at 7100 Shoreline Court, South San Francisco, California 94080. The parties agree as follows:

1. DEFINITIONS

1.1 "Confidential Information" shall mean, with respect to a party, all information of any kind whatsoever, and all tangible and intangible embodiments thereof of any kind whatsoever, which is disclosed by such party to the other party and is marked, identified as or otherwise acknowledged to be confidential at the time of disclosure to the other party. Notwithstanding the foregoing, Confidential Information of a party shall not include information which the other party can establish by written documentation (a) to have been publicly known prior to disclosure of such information by the disclosing party to the other party, (b) to have become publicly known, without fault on the part of the other party, subsequent to disclosure of such information by the disclosing party to the other party, (c) to have been received by the other party at any time from a source, other than the disclosing party, rightfully having possession of and the right to disclose such information, (d) to have been otherwise known by the other party prior to disclosure of such information by the disclosing party to the other party, or (e) to have been independently developed by employees or agents of the other party without access to or use of such information disclosed by the disclosing party to the other party (each, a "Confidentiality Exception").

1.2 "Derived" or "derived" shall mean obtained, developed, created, designed, derived or resulting from, based upon or otherwise generated (whether directly or indirectly, or in whole or in part).

1.3 "Master Closing Agreement" shall mean a Master Closing Agreement between Fluidigm, UABRF and Oculus Pharmaceuticals, Inc. of even date hereof.

1.4 "Materials" shall mean the proprietary materials provided by one party to the other under this Agreement, together with all derivatives and parts thereof.

1.5 "Principal Investigator" shall mean [***].

1.6 "Program" shall mean the research program described in Section 2.1.

1.7 "Program Period" shall mean the period commencing on the Effective Date, and continuing through the fifth (5th) anniversary of the Effective Date, unless terminated earlier as provided below.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1.8 "Program Technology" shall mean, collectively, all inventions, discoveries, data and information (whether patentable or not patentable) generated in connection with the Program, excluding the Materials. Unless subject to a Confidentiality Exception, all Program Technology shall be Confidential Information of UABRF.

1.9 "Research Plan" shall mean the annual written research workplan for the Program.

2. SPONSORED RESEARCH

2.1 Statement of Work. During the Program Period, UABRF shall conduct the Program in accordance with the Research Plan. The Research Plan for the first (1st) year of the Program is attached hereto as Exhibit A . No later than ninety (90) days prior to each anniversary of the Effective Date (other than the fifth (5th) anniversary thereof) during the term of this Agreement the parties shall mutually agree upon the Research Plan for the upcoming year of the Program and shall amend Exhibit A by attaching such mutually agreed upon Research Plan thereto. Except as provided in this Section 2.1 or except by the mutual written agreement of the parties, the Research Plan shall not be altered.

2.2 Principal Investigator. UABRF shall conduct the Program under the direction of the Principal Investigator. The Principal Investigator shall be responsible for the supervision and administration of the Program, including all budgeting and revisions to the budget in accordance with all applicable policies of UABRF. Fluidigm shall consider in good faith utilizing on mutually acceptable terms and conditions the engineering capability available at the Principal Investigator's laboratory for the continuing development of Fluidigm's Topaz microprocessor product line as reasonably required by, but at the sole discretion of, Fluidigm at additional compensation over and above the amounts set forth in Section 4.1 of this Agreement.

2.3 Records and Reports.

2.3.1 UABRF shall keep complete and accurate records of the work performed under this Agreement in accordance with established good laboratory practices and appropriate for patent purposes. Fluidigm shall have the right, upon reasonable notice and during reasonable business hours, to inspect and make copies of such accounts, notes, data and records.

2.3.2 Within [***] after the end of each calendar quarter during the Program Period, UABRF shall prepare and provide Fluidigm with quarterly written reports describing the work performed during such calendar quarter under this Agreement and all resulting Program Technology. Within [***] after the expiration or earlier termination of the Program Period, UABRF shall prepare and provide Fluidigm with a comprehensive written report describing all work performed under this Agreement and all resulting Program Technology. At Fluidigm's request, upon reasonable notice, UABRF also shall provide interim summary reports and copies of all data generated under this Agreement.

2.4 Informal Consultations. At reasonable times during the Program Period, Fluidigm's representatives may consult informally with the Principal Investigator regarding the Program personally, by telephone, email or other means of communication.

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3. MATERIAL TRANSFER

3.1 Materials. Each party shall provide to the other party (the "Recipient") those Materials required to be provided under the Research Plan. The Recipient of any Materials hereby acknowledges that, as between the parties, the other party is the sole owner or licensee of such Materials.

3.2 Permitted Use. The Recipient shall use the Materials solely as permitted under the Research Plan and not for any other purpose. THE RECIPIENT UNDERSTANDS THAT THE MATERIALS ARE PROVIDED SOLELY FOR CERTAIN RESEARCH USE ONLY AND HAVE NOT BEEN APPROVED FOR HUMAN USE. THE RECIPIENT SHALL NOT ADMINISTER THE MATERIALS TO HUMANS IN ANY MANNER OR FORM. Provided however, upon the Fluidigm Materials becoming commercially available ("Commercial Fluidigm Materials"), the restrictions of this Section 3.2 shall terminate as to the Commercial Fluidigm Materials, and the UABRF /UAB shall have the right to use the Commercial Fluidigm Materials on the same terms and conditions as Fluidigm generally makes the Commercial Fluidigm Materials commercially available to third parties.

3.3 No Transfer. The Recipient shall not transfer the Materials to any third party without the prior express written consent of the other party. The Recipient shall limit transfer and disclosure of the Materials on a need to know basis, as reasonably necessary for the conduct of the Program, to its directors, officers and employees who are bound by written agreements with the Recipient to not use or transfer the Materials for any purpose other than those permitted by this Agreement. The Recipient shall notify the other party promptly upon discovery of any unauthorized use or transfer thereof.

3.4 Return of Materials. Upon expiration or termination of the Program Period, the Recipient shall promptly return or destroy (as requested by the other party) all remaining Materials to the other party.

3.5 No Warranty. THE RECIPIENT ACKNOWLEDGES THAT THE MATERIALS ARE EXPERIMENTAL IN NATURE AND ARE PROVIDED "AS IS." THE PARTY PROVIDING THE MATERIALS MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRES OR IMPLIED, WITH RESPECT TO THE MATERIALS OR THE USE THEREOF, AND DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT.

4. FUNDING

4.1 Budget and Payment. Subject to the terms and conditions of this Agreement, Fluidigm shall support the Program by an aggregate grant to UABRF of [***], payable in [***] equal quarterly installments of [***] on or before the thirtieth (30th) day of each calendar quarter after the Effective Date. Fluidigm shall have no obligation to provide funds to UABRF in excess of such amount. All payments by Fluidigm to UABRF under this Agreement shall be originated from a United States bank located in the United States and made by bank wire transfer

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to the following account: Account Name: UAB Research Foundation; Bank Name: First Commercial Bank; ABA Number: [***], Account Number: [***].

4.2 Accounting. Upon request by Fluidigm, UABRF shall provide to Fluidigm a report of expenditures shown by major cost categories.

5. PROGRAM TECHNOLOGY

5.1 Ownership.

5.1.1 All right, title and interest in all Program Technology (a) made or conceived solely by employees or others acting on behalf of UABRF (the "UABRF Inventions") shall be owned solely by UABRF; (b) made or conceived solely by employees or others acting on behalf of Fluidigm (the "Fluidigm Inventions") shall be owned solely by Fluidigm; and (c) made or conceived jointly by employees or others acting on behalf of Fluidigm and by employees or others acting on behalf of UABRF (the "Joint Inventions") shall be owned jointly by Fluidigm and UABRF. Each party shall have the right, subject to the provisions of this Agreement, to freely exploit, transfer, license or encumber its rights in any Joint Inventions, and the patent rights and other intellectual property rights therein, without the consent of, or payment or accounting to, the other party.

5.1.2 The transfer of physical possession of any materials or technology owned by, and the physical possession and use of any materials or technology by, Fluidigm or UABRF, as the case may be, shall not be (nor construed as) a sale, lease, offer to sell or lease, or other transfer of title of such materials or technology to UABRF or Fluidigm, as the case may be.

5.2 Disclosure. UABRF promptly shall disclose to Fluidigm any Program Technology made or conceived by or on behalf of UABRF, and provide Fluidigm with copies of all information available to UABRF regarding such Program Technology.

5.3 Options and Licenses.

5.3.1 UABRF hereby grants to Fluidigm a nonexclusive, worldwide, royalty-free license (together with the right to grant sublicenses), under UABRF's rights in the Program Technology, to use all unpatented Program Technology for all purposes.

5.3.2 With respect to each discovery or invention comprising Program Technology, UABRF hereby grants to Fluidigm an exclusive option to obtain an exclusive, worldwide, royalty-bearing license (with the exclusive right to sublicense) under any issued patents relating to such discovery or invention for all purposes. The option with respect to each such discovery or invention shall be exercisable for the [***] following disclosure to Fluidigm of all information available to UABRF regarding such discovery or invention. The license shall be on mutually acceptable terms and conditions. Upon exercise by Fluidigm of the option with respect to each such discovery or invention, the parties shall negotiate in good faith, and shall use good faith efforts to execute a written agreement evidencing such license prior to the expiration of [***] days following the expiration of the one-year option term described above. The actual royalty rate shall be negotiated in good faith based on reasonable factors including without limitation [***]

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[***]. Fluidigm shall have the right to control the filing, prosecution, maintenance and enforcement of all patent applications and patents that are so licensed to Fluidigm.

5.3.3 If Fluidigm fails to obtain a license under Section 5.3.2 with respect to any patent rights, during the [***] day negotiation period under Section 5.3.2 ("Option Negotiation Period"), UABRF for a [***] month period following the expiration of the Option Negotiation Period shall [***].

5.4 Patent Rights

5.4.1 UABRF shall control the preparation, filing, prosecution and maintenance of all patents and patent applications to the extent they claim UABRF Inventions or Joint Inventions. Fluidigm shall advise UABRF no later than ninety (90) days after disclosure by UABRF of a UABRF Invention or a Joint Invention whether it intends to reimburse UABRF for the reasonable out of pocket costs of preparing, filing and prosecuting patent applications covering such UABRF Invention or Joint Invention. If Fluidigm declines to reimburse UABRF for all reasonable costs of preparing, filing and prosecuting a patent application for a patentable UABRF Invention or Joint Invention in any jurisdiction, UABRF may do so at its sole cost, but such patent application and patent shall be excluded from Fluidigm's option to license under Section 5.3 above; provided, however, UABRF shall not file or prosecute a patent application when Fluidigm has demonstrated to UABRF that the filing or prosecution of such patent application would be prejudicial to the optimization of such UABRF Invention or Joint Invention. UABRF shall give Fluidigm an opportunity to review the text of, and shall reasonably consider Fluidigm's comments with respect to, each patent application for a UABRF Invention or a Joint Invention before filing, and shall supply Fluidigm with a copy of such application as filed, together with notice of its filing date and serial number. UABRF shall prepare, file and prosecute patent applications covering UABRF Inventions or Joint Inventions in all jurisdictions requested by Fluidigm, provided that Fluidigm has not declined to reimburse UABRF for all reasonable costs of preparing, filing and prosecuting such patent applications.

5.4.2 Fluidigm shall control, at its sole expense, the preparation, filing, prosecution and maintenance of all patents and patent applications to the extent they claim Fluidigm Inventions.

5.4.3 Each party shall cooperate with the other party, execute all lawful papers and instruments and make all rightful oaths and declarations as may be necessary in the preparation, filing, prosecution maintenance and enforcement of all patents and patent applications described in this Section 5.4.

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6. CONFIDENTIALITY AND PUBLICATION

6.1 Confidential Information. During the term of this Agreement, and for a period of five (5) years following the expiration or earlier termination hereof, each party shall maintain in confidence all Confidential Information disclosed by the other party, and shall not use, disclose or grant the use of the Confidential Information except on a need-to-know basis to those directors, officers, employees, consultants, clinical investigators, contractors, (sub)licensees, distributors or permitted assignees, to the extent such disclosure is reasonably necessary in connection with such party's activities as expressly authorized by this Agreement. To the extent that disclosure is authorized by this Agreement, prior to disclosure, each party hereto shall obtain agreement of any such person or entity to hold in confidence and not make use of the Confidential Information for any purpose other than those permitted by this Agreement. Each party shall notify the other promptly upon discovery of any unauthorized use or disclosure of the other party's Confidential Information.

6.2 Terms of this Agreement. Except as otherwise provided in Section 6.1 or 6.3, neither party shall disclose any terms or conditions of this Agreement to any third party without the prior consent of the other party. Notwithstanding the foregoing, prior to execution of this Agreement, the parties shall agree upon the substance of information that can be used to describe the terms of this transaction, and each party may disclose such information, as modified by mutual agreement from time to time, without the other party's consent.

6.3 Permitted Disclosures. The confidentiality obligations contained in this Section 6 shall not apply to the extent that the receiving party is required (a) to disclose information by law, order or regulation of a governmental agency or a court of competent jurisdiction, or (b) to disclose information to any governmental agency for purposes of obtaining approval to test or market a Product, provided in either case that the receiving party shall provide written notice thereof to the other party and sufficient opportunity to object to any such disclosure or to request confidential treatment thereof.

6.4 Publication. Fluidigm acknowledges UABRF's interest in publishing certain results of the Program to obtain recognition within the scientific community and to advance the state of scientific knowledge. Each party also recognized their mutual interest in obtaining valid patent protection and protecting business interests. Consequently, if UABRF desires to make a publication (including any oral disclosure made without obligation of confidentiality) of any results of the Program, UABRF shall provide Fluidigm with a copy of the proposed written publication at least [***] days prior to submission for publication, or an outline of such oral disclosure at least [***] days prior to presentation. Fluidigm shall have the right (a) to propose modifications to the publication for patent reasons, and (b) to request a reasonable delay in publication in order to protect patentable information. If Fluidigm requests such a delay, UABRF shall delay submission or presentation of the publication for a period of [***] days to enable patent applications to be prepared and filed. Upon the expiration of such [***] day period (in the case of proposed written disclosures) or [***] day period (in the case of proposed oral disclosures) from receipt by Fluidigm, UABRF shall be free to proceed with the written publication or the presentation, respectively, unless Fluidigm has requested the delay described above.

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7. TERM

7.1 Expiration. Unless terminated earlier pursuant to Section 7.2, this Agreement shall expire on the expiration of the Program Period.

7.2 Termination for Cause. A party may terminate this Agreement upon or after a material breach of this Agreement by the other party, if the breaching party has not cured such breach within thirty (30) days after notice thereof from the other party.

7.3 Effect of Expiration and Termination. Expiration or termination of this Agreement shall not relieve the parties of any obligation accruing prior to such expiration or termination. The provisions of Sections 5, 6 and 8 shall survive the expiration or termination of this Agreement. Except as the parties otherwise agree in writing, termination of this Agreement shall not affect the Master Closing Agreement.

7.4 Outstanding Commitments. Upon the giving of notice of termination by either party, UABRF shall use best efforts to limit or terminate any outstanding commitments in connection with the Program. Fluidigm shall reimburse UABRF for all direct costs incurred by it for all work performed through the effective termination date, and for all outstanding obligations which cannot be cancelled; provided, however, that Fluidigm's aggregate funding obligation under this Agreement shall not exceed the amount set forth in Section 4.1 above. Within thirty (30) days after the effective date of termination, UABRF shall furnish Fluidigm with a final statement for settlement of all costs to be reimbursed. This statement may include costs incurred before the notice of termination was given but which were not yet billed. If funds received by UABRF exceed expenses incurred, UABRF shall reimburse Fluidigm for any such excess funds at the time such final statement is furnished to Fluidigm.

8. INDEMNIFICATION

8.1 Indemnification.

8.1.1 Fluidigm shall defend, indemnify and hold UABRF harmless from all losses, liabilities, damages and expenses (including reasonable attorneys' fees and costs) resulting from any claims, demands, actions and other proceedings by any unaffiliated third party to the extent resulting from Fluidigm's gross negligence or willful misconduct under this Agreement or use of the UABRF Materials or UABRF Confidential Information.

8.1.2 UABRF shall (to the fullest extent to which University of Alabama at Birmingham has the right under applicable law to do so) defend, indemnify and hold Fluidigm harmless from all losses, liabilities, damages and expenses (including reasonable attorneys, fees and costs) resulting from any claims, demands, actions and other proceedings by any unaffiliated third party to the extent resulting from UABRF's gross negligence or willful misconduct under the Agreement, or use of the Fluidigm Materials or Fluidigm Confidential Information.

8.1.3 A party (the "Indemnitee") that intends to claim indemnification under this Section 8.1 shall promptly notify the other party (the "Indemnitor") of any liability or action in respect of which the Indemnitee intends to claim such indemnification, and the Indemnitor shall have the right to participate in, and, to the extent the Indemnitor so desires,

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jointly with any other indemnitor similarly noticed, to assume the defense thereof with counsel selected by the Indemnitor; provided, however, that an Indemnitee shall have the right to retain its own counsel, with the fees and expenses to be paid by the Indemnitor, if representation of such Indemnitee by the counsel retained by the Indemnitor would be inappropriate due to actual or potential differing interests between such Indemnitee and any other party represented by such counsel in such proceedings. The indemnity agreement in this Section 8.1 shall not apply to amounts paid in settlement of any loss, claim, damage, liability or action if such settlement is effected without the consent of the Indemnitor, which consent shall not be unreasonably withheld or delayed. The failure to deliver notice to the Indemnitor within a reasonable time after the commencement of any such action, if prejudicial to its ability to defend such action, shall relieve the Indemnitor of any liability to the Indemnitee under this Section 8.1, but the omission so to deliver notice to the Indemnitor will not relieve it of any liability that it may have to the Indemnitee otherwise than under this Section 8.1. The Indemnitor may not settle the action or otherwise consent to an adverse judgment in such action that diminishes the rights or interests of the Indemnitee without the express written consent of the Indemnitee. The Indemnitee, its employees and agents, shall cooperate fully with the Indemnitor and its legal representatives in the investigation and defense of any action, claim or liability covered by this indemnification.

8.2 Representation. UABRF hereby represents that to the knowledge of UABRF and the Principal Investigator the rights and obligations of UABRF under this Agreement do not conflict with rights and obligations provided under other agreements which it has with third parties, including the federal and local governments. During the Program Period (or while Fluidigm is providing any subsequent funding), neither UABRF nor the Principal Investigator shall enter into any other agreements which conflict with rights and obligations provided hereunder, including any rights and obligations which survive termination hereto. UABRF shall enter into written agreements with its employees. consultants and such others as is necessary to obtain ownership of inventions, discoveries and other useful research results, products and processes made by them pursuant to activity carried out in connection with the Program.

9. MISCELLANEOUS

9.1 Notices. Any consent, notice or report required or permitted to be given or made under this Agreement by one of the parties to the other shall be in writing and addressed to such other party at its address indicated below, or to such other address as the addressee shall have last furnished in writing to the addressor, and shall be effective upon receipt by the addressee.

If to UABRF: UAB Research Foundation
1120G Administration Building
704 20th Street
Birmingham, Alabama 35294
Attention: Director

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If to Fluidigm: Fluidigm Corporation
7100 Shoreline Court
South San Francisco, California 94080
Attention: President

with a copy to: Fluidigm Corporation
7100 Shoreline Court
South San Francisco, California 94080
Attention: General Counsel

9.2 Assignment. Except as otherwise expressly provided under this Agreement neither this Agreement nor any right or obligation hereunder may be assigned or otherwise transferred (whether voluntarily, by operation of law or otherwise), without the prior express written consent of the other party; provided, however, that either party may, without such consent, assign this Agreement and its rights and obligations hereunder in connection with the transfer or sale of all or substantially all of its business, or in the event of its merger, consolidation, change in control or similar transaction. Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment or transfer in violation of this Section 9.2 shall be void.

9.3 Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Alabama, without regard to the conflicts of law principles thereof.

9.4 Entire Agreement. This Agreement and the Master Closing Agreement (together with the Ancillary Agreements, as defined in the Master Closing Agreement) contain the entire understanding of the parties with respect to the subject matter hereof. All express or implied representations, agreements and understandings, either oral or written, heretofore made are expressly superseded by this Agreement and the Master Closing Agreement.

9.5 Independent Contractors. Each party hereby acknowledges that the parties shall be independent contractors and that the relationship between the parties shall not constitute a partnership, joint venture or agency. Neither party shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other party, without the prior consent of the other party to do so.

9.6 Waiver. The waiver by a party of any right hereunder, or of any failure to perform or breach by the other party hereunder, shall not be deemed a waiver of any other right hereunder or of any other breach or failure by the other party hereunder whether of a similar nature or otherwise.

9.7 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Agreement as of the date first written above.

UAB RESEARCH FOUNDATION

By: _____

Title: _____

FLUIDIGM CORPORATION

By: _____

Title: _____

Acknowledged and agreed to
this March , 2003.

_____

Dr. [***],
Principal Investigator

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT A

RESEARCH PLAN

[***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

APPENDIX 1
(To Exhibit A ("Research Plan")

[***]

Part Number	Item	Quantity
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

Other Materials included: [***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT D

PATENTS AND PATENT APPLICATIONS

[***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 10.11A

8805. LICI.001
UAB Research Foundation

LICENSE AGREEMENT

THIS LICENSE AGREEMENT (this "Agreement") dated as of March 7, 2003 (the "Effective Date"), is entered into between The UAB Research Foundation, an Alabama not for profit organization ("UABRF"), having a place of business at 1120G Administration Building, 704 20th Street, Birmingham, Alabama 35294, and Fluidigm Corporation, a California corporation ("Fluidigm"), having a place of business at 7100 Shoreline Court, South San Francisco, California 94080.

WHEREAS, UABRF owns or has rights in certain technology regarding nanovolume crystallization arrays.

WHEREAS, UABRF and Oculus Pharmaceuticals, Inc. ("Oculus") have entered into that certain License Agreement dated as of September 21, 2001 ("Oculus Agreement") pursuant to which UABRF has granted to Oculus an exclusive license to the Oculus Agreement Technology (as defined below), on the terms and conditions of the Oculus Agreement.

WHEREAS, UABRF and Oculus have terminated the Oculus Agreement effective as of January 30, 2003.

WHEREAS, UABRF has licensed to Diversified Scientific, Inc. ("DSI") rights in certain other technology, which certain technology is identified in the attached Exhibit A ("UABRF/DSI Technology").

WHEREAS, DSI is performing certain research pursuant to one or more grants, existing as of December 19, 2002, between UAB (as defined below) and DSI under Defense Small Business Innovation Research Program.

WHEREAS, Fluidigm desires to obtain an exclusive worldwide license under the Licensed IP Rights (as defined below), on the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants herein contained, the parties agree as follows:

1. DEFINITIONS

1.1 "Affiliate" shall mean, with respect to any Person, any other Person which directly or indirectly controls, is controlled by, or is under common control with, such Person. A Person shall be regarded as in control of another Person if it owns, or directly or indirectly controls, at least forty percent (40%) of the voting stock or other ownership interest of the other Person, or if it directly or indirectly possesses the power to direct or cause the direction of the management and policies of the other Person by any means whatsoever.

1.2 "Confidential Information" shall mean, with respect to a party, all information of any kind whatsoever, and all tangible and intangible embodiments thereof of any

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[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

kind whatsoever, which is disclosed by such party to the other party and is marked, identified as or otherwise acknowledged to be confidential at the time of disclosure to the other party. Notwithstanding the foregoing, Confidential Information of a party shall not include information which the other party can establish by written documentation (a) to have been publicly known prior to disclosure of such information by the disclosing party to the other party, (b) to have become publicly known, without fault on the part of the other party, subsequent to disclosure of such information by the disclosing party to the other party, (c) to have been received by the other party at any time from a source, other than the disclosing party, rightfully having possession of and the right to disclose such information, (d) to have been otherwise known by the other party prior to disclosure of such information by the disclosing party to the other party, or (e) to have been independently developed by employees or agents of the other party without access to or use of such information disclosed by the disclosing party to the other party.

1.3 "Fluidigm Series C Preferred Stock" shall have the meaning set forth in Section 1.9 of the Master Closing Agreement.

1.4 "Licensed IP Rights" shall mean, collectively, the Licensed Patent Rights and the Licensed Know-How Rights.

1.5 "Licensed Know-How Rights" shall mean all trade secret and other know-how rights in all information and data disclosed on or before the Effective Date that (i) is not generally known (including, but not limited to, information and data regarding formulae, procedures, protocols, techniques and results of experimentation and testing), (ii) is developed by Dr. Larry DeLucas in his capacity as a UAB faculty member or by UAB personnel under the scientific direction and scientific supervision of Dr. Larry DeLucas, and (iii) is necessary or useful for Fluidigm to research, develop, make, use, sell or seek regulatory approval to market a composition, or to practice any method or process, at any time (a) comprising the Oculus Agreement Technology or (b) claimed or covered by in any issued patent or pending patent application within the Licensed Patent Rights.

1.6 "Licensed Patent Rights" shall mean (a) those certain patent applications and patents listed on Exhibit B hereto; (b) all patent applications heretofore or hereafter filed or having legal force in any country which claim any Oculus Agreement Technology; (c) all patents that have issued or in the future issue from the patent applications described in clauses (a) and (b) of this Section 1.6, including utility, model and design patents and certificates of invention; and (d) all divisionals, continuations, continuations-in-part, reissues, renewals, extensions or additions to any such patent applications and patents.

1.7 "Master Closing Agreement" shall mean a Master Closing Agreement between Fluidigm, UABRF and Oculus of even date hereof.

1.8 "NanoScreen Patent Rights" shall mean (a) those certain patent applications and patents listed on Exhibit B hereto; (b) all patents that have issued or in the future issue from any such patent applications, including utility, model and design patents and certificates of invention; and (c) all divisionals, continuations, continuations-in-part, reissues, renewals, extensions or additions to any such patent applications and patents.

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1.9 "Oculus Agreement Technology" shall mean collectively, the technology, processes, inventions, trade secrets, know-how and other proprietary property described in Exhibit C hereto.

1.10 "Person" shall mean an individual, corporation, partnership, limited liability company, trust, business trust, association, joint stock company, joint venture, pool, syndicate, sole proprietorship, unincorporated organization, governmental authority or any other form of entity not specifically listed herein.

1.11 "Third Party" shall mean any Person other than UABRF, Fluidigm and their respective Affiliates.

1.12 "UAB" shall mean the University of Alabama at Birmingham.

1.13 "UABRF/DSI License Agreements" shall mean, collectively, [***].

1.14 "UAB Related Entities" shall mean and include UAB, UABRF, University Hospital, The University of Alabama Health Services Foundation ("UAHSF"), Southern Research Institute and all other entities within the UAB Medical Center, which are under the control of the Board of Trustees of The University of Alabama or are associated with said Board of Trustees through an affiliation agreement.

2. REPRESENTATIONS AND WARRANTIES

2.1 Mutual Representations and Warranties Each party hereby represents and warrants to the other party as follows:

2.1.1 Corporate Existence. Such party is a corporation duly organized, validly existing and in good standing under the laws of the state in which it is incorporated.

2.1.2 Authorization and Enforcement of Obligations. Such party (a) has the corporate power and authority and the legal right to enter into this Agreement and to perform its obligations hereunder, and (b) has taken all necessary corporate action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder. This Agreement has been duly executed and delivered on behalf of such party, and constitutes a legal, valid, binding obligation, enforceable against such party in accordance with its terms.

2.1.3 No Consents. All necessary consents, approvals and authorizations of all governmental authorities and other Persons required to be obtained by such party in connection with this Agreement have been obtained.

2.1.4 No Conflict. The execution and delivery of this Agreement and the performance of such party's obligations hereunder (a) do not conflict with or violate any

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requirement of applicable laws or regulations, and (b) do not conflict with, or constitute a default under, any contractual obligation of it.

2.2 UABRF Representations and Warranties. UABRF represents and warrants to Fluidigm as follows:

2.2.1 Ownership. UABRF is the sole owner of the Licensed IP Rights (other than those listed under Item No. 3 of Exhibit B), and as of the Effective Date has no knowledge of any Third Party having any license or other interest in such Licensed IP Rights. UABRF shall use its commercially reasonable efforts to provide Fluidigm with (a) evidence of UABRF's sole ownership of those Licensed IP Rights listed under Item No. 3 of Exhibit B , and (b) a letter from DSI to Fluidigm stating that DSI has no license or other interest in NanoScreen Patent Rights except to the extent necessary for DSI to perform its research obligations pursuant to the SBIR Grants (as defined below).

2.2.2 No Injunction. No action, suit or proceeding before any court or government body is instituted (or is pending) by any government authority or any other Person to restrain or prohibit this Agreement or the consummation of the transactions contemplated hereby. No preliminary or permanent injunction or other order issued by any federal or state court of competent jurisdiction preventing this Agreement or the consummation of the transactions contemplated hereby is in effect.

2.2.3 No Infringement. As of the Effective Date, UABRF and Dr. Larry DeLucas (a) are not aware of any Third Party patent, patent application or other intellectual property rights that would be infringed by practicing any process or method or by making, using or selling any composition which is claimed or disclosed in the Licensed Patent Rights or which constitutes Licensed Know-How Rights; (b) are not aware of any infringement or misappropriation by a Third Party of the Licensed IP Rights; and (c) are not aware of any license or other right granted to DSI or any other Third Party under the NanoScreen Patent Rights. Provided however, UABRF has disclosed to Fluidigm the potential infringement by DSI of the Licensed IP Rights to the extent necessary for DSI to perform its research obligations pursuant to one or more grants (the "SBIR Grants"), existing as of December 19, 2002, between UAB and DSI under the Defense Small Business Innovation Research (SBIR) Program, with the understanding that neither DSI nor any other third party would have the right to commercialize any results of such SBIR grants that would infringe the Licensed IP Rights without first obtaining a license from Fluidigm under the Licensed IP Rights. Not later than ten (10) days following the Effective Date, UABRF shall provide Fluidigm with copies of all documents and instruments relating to such SBIR Grants.

3. LICENSE GRANT

3.1 Licensed IP Rights. UABRF hereby grants to Fluidigm an exclusive, perpetual, irrevocable, royalty-free, worldwide license (including the right to grant sublicenses) under the Licensed IP Rights. The license grant under the Licensed IP Rights (other than the NanoScreen Patent Rights) is subject to the licenses previously and expressly granted by UABRF to DSI pursuant to the UABRF/DSI License Agreements regarding the UABRF/DSI Technology only to the extent necessary for DSI to exercise its license rights under the

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UABRF/DSI Technology granted thereunder. The license grant under the NanoScreen Patent Rights is not subject to any previously granted licenses other than those certain rights which may have been granted to DSI to the extent necessary for DSI to perform its research obligations pursuant to the SBIR Grants. To the extent any of the rights, title and interest in and to the Licensed IP Rights can be neither assigned nor licensed by UABRF to Fluidigm without (a) the consent of, or (b) breach by UABRF of any agreement with, any Third Party, UABRF hereby irrevocably waives and agrees never to assert such non-assignable and non-licensable rights, title and interest against Fluidigm or any of Fluidigm's successors in interest to such non-assignable and non-licensable rights during the term of this Agreement.

3.2 Sublicenses. Fluidigm shall not sublicense the Licensed IP Rights prior to the first (1st) anniversary of the Effective Date except in connection with settlement of any action or claim relating to the technology that is the subject of the Licensed IP Rights. Fluidigm shall give UABRF prompt written notice of each sublicense under this Agreement. Each sublicense shall be subject to the terms and conditions of this Agreement.

3.3 Availability of the Licensed IP Rights. UABRF shall provide Fluidigm with all information available to UABRF regarding the Licensed IP Rights.

3.4 Reservation of Rights.

3.4.1 Research Use. UABRF hereby retains the right to, and this Agreement shall not limit UABRF's ability to, utilize the Licensed IP Rights for internal research, academic and educational purposes at UAB, UAB Related Entities and academic institution collaborators of UAB, for patient care at UAB and UAB Related Entities, and/or for the performance of services for for-profit or not-for-profit institutions.

3.4.2 Obligations to U.S. Government. UABRF agrees that during the term of this Agreement UABRF shall not use the Licensed IP Rights in any manner except for internal research, academic and educational purposes at UAB, UAB Related Entities and academic institution collaborators of UAB, for patient care at UAB and UAB Related Entities, and/or for the performance of services for for-profit or not-for-profit institutions as provided in Section 3.4.1 above and as may be necessary or appropriate to fulfill the obligations of UABRF or UAB under the National Institutes of Health ("NIH") grant used to fund the research resulting in the development of certain portion of the Licensed IP Rights. In determining the actions required under such grant, UABRF shall consult with Fluidigm and keep Fluidigm informed, but UABRF shall have the ultimate right to determine the necessary and appropriate actions relative thereto. UABRF's rights to the Licensed IP Rights for use in fulfilling UAB's obligations under the NIH grant shall only relate to those portions of the Licensed IP Rights funded by such NIH grant.

3.5 Non-Assertion Covenant. To the extent the research activities of DSI conducted in accordance with the SBIR Grants infringe the rights granted to Fluidigm under this Section 3, Fluidigm agrees not to assert such rights against DSI. Fluidigm agrees not to assert against DSI such rights only to the extent expressly stated herein. No license or other right by Fluidigm in favor of DSI shall be created hereunder by implication, estoppel or otherwise.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

4. LICENSE ISSUE FEE

Within thirty (30) days after the Effective Date Fluidigm shall (a) pay UABRF the sum in cash of [***] and (b) issue to UABRF such number of Fluidigm Series C Preferred Stock as provided in Section 2.3 of the Master Closing Agreement.

5. RESEARCH AND DEVELOPMENT OBLIGATIONS

5.1 Research and Development Efforts. Fluidigm shall use commercially reasonable efforts to research, develop and commercialize the Licensed IP Rights as Fluidigm determines commercially feasible. Appendix 1 of the Sponsored Research Agreement sets forth the components of Fluidigm's Topaz System which Fluidigm plans to release commercially.

5.2 Records. Fluidigm shall maintain records, in sufficient detail and in good scientific manner, which shall reflect all work done and results achieved in the performance of its research and development regarding the Licensed IP Rights (including all data in the form required under all applicable laws and regulations).

5.3 Reports. Within ninety (90) days following the end of each calendar year during the term of this Agreement, Fluidigm shall prepare and deliver to UABRF a written summary report which shall describe the research and development of the Licensed IP Rights during such year.

6. CONFIDENTIALITY

6.1 Confidential Information. During the term of this Agreement, and for a period of five (5) years following the expiration or earlier termination hereof, each party shall maintain in confidence all Confidential Information disclosed by the other party, and shall not use, disclose or grant the use of the Confidential Information except on a need-to-know basis to those directors, officers, employees, consultants, clinical investigators, contractors, (sub)licensees, distributors or permitted assignees, to the extent such disclosure is reasonably necessary in connection with such party's activities as expressly authorized by this Agreement. To the extent that disclosure is authorized by this Agreement, prior to disclosure, each party hereto shall obtain agreement of any such person or entity to hold in confidence and not make use of the Confidential Information for any purpose other than those permitted by this Agreement. Each party shall notify the other promptly upon discovery of any unauthorized use or disclosure of the other party's Confidential Information.

6.2 Terms of this Agreement. Except as otherwise provided in Section 6.1 or 6.3, neither party shall disclose any terms or conditions of this Agreement to any third party without the prior consent of the other party. Notwithstanding the foregoing, prior to execution of this Agreement, the parties have agreed upon the substance of information that can be used to describe the terms of this transaction, and each party may disclose such information, as modified by mutual agreement from time to time, without the other party's consent.

6.3 Permitted Disclosures. The confidentiality obligations contained in this Section 6 shall not apply to the extent that the receiving party (the "Recipient") is required (a) to disclose information by law, order or regulation of a governmental agency or a court of

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competent jurisdiction, or (b) to disclose information to any governmental agency for purposes of obtaining approval to test or market a product, provided in either case that the Recipient shall provide written notice thereof to the other party and sufficient opportunity to object to any such disclosure or to request confidential treatment thereof.

7. PATENTS

7.1 Prosecution and Maintenance. Fluidigm shall be responsible for and shall control, at its sole cost, the preparation, filing, prosecution, defense (including without limitation prosecution, defense and settlement of any interference or opposition) and maintenance of the Licensed Patent Rights. Fluidigm shall give UABRF an opportunity to review and comment on the text of each patent application within the Licensed Patent Rights before filing, and shall provide UABRF with a copy of such patent application as filed, together with notice of its filing date and serial number. UABRF shall cooperate with Fluidigm, execute all lawful papers and instruments and make all rightful oaths and declarations as may be necessary in the preparation, prosecution and maintenance of the Licensed Patent Rights.

Enforcement.

7.2.1 Each party shall notify the other party of any infringement known to such party of any Licensed Patent Rights and shall provide the other party with the available evidence, if any, of such infringement.

7.2.2 Fluidigm, at its sole expense, shall have the right to determine the appropriate course of action to enforce the Licensed Patent Rights or otherwise abate the infringement thereof, to take (or refrain from taking) appropriate action to enforce the Licensed Patent Rights, to control any litigation or other enforcement action and to enter into, or permit, the settlement of any such litigation or other enforcement action with respect to the Licensed Patent Rights, and shall consider, in good faith, the interests of UABRF in so doing. UABRF shall cooperate with Fluidigm in the execution of any action to enforce the Licensed Patent Rights. Fluidigm shall retain all monies recovered upon the final judgment or settlement of any such suit to enforce the Licensed Patent Rights.

8. TERMINATION

8.1 Expiration. Subject to the provisions of Section 8.2 below, this Agreement shall expire on the expiration of the last to expire of the Licensed Patent Rights. Upon expiration of this Agreement under this Section 8.1, Fluidigm shall have a paid-up, exclusive, worldwide license under the Licensed Know-How Rights.

8.2 Termination by Fluidigm. Fluidigm may terminate this Agreement, in its sole discretion, upon thirty (30) days prior written notice to UABRF. Upon termination of this Agreement by Fluidigm under this Section 8.2, Fluidigm shall have a paid-up, non-exclusive, worldwide license under the Licensed Know-How Rights.

Effect of Expiration or Termination. Expiration or termination of this Agreement shall not relieve the parties of any obligation accruing prior to such expiration or termination, and the provisions of Sections 6, 7 and 9 shall survive the expiration or termination

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of this Agreement. Except as the parties otherwise agree in writing, termination of this Agreement shall not affect the Master Closing Agreement.

9. INDEMNIFICATION

9.1 Indemnification. Fluidigm shall defend, indemnify and hold the UABRF harmless from all losses, liabilities, damages and expenses (including reasonable attorneys' fees and costs) resulting from any claims, demands, actions and other proceedings by any Third Party to the extent resulting from Fluidigm's use of the Licensed IP Rights under this Agreement.

9.2 Procedure. UABRF promptly shall notify Fluidigm of any claim, demand, action or other proceeding for which UABRF intends to claim indemnification. Fluidigm shall have the right to participate in, and to the extent Fluidigm so desires jointly with any other indemnitor similarly noticed, to assume the defense thereof with counsel selected by Fluidigm; provided, however, that UABRF shall have the right to retain its own counsel, with the fees and expenses to be paid by UABRF, if representation of UABRF by the counsel retained by Fluidigm would be inappropriate due to actual or potential differing interests between UABRF and any other party represented by such counsel in such proceedings. The indemnity obligations under this Section 9 shall not apply to amounts paid in settlement of any claim, demand, action or other proceeding if such settlement is effected without the prior express written consent of Fluidigm, which consent shall not be unreasonably withheld or delayed. The failure to deliver notice to Fluidigm within a reasonable time after notice of any such claim or demand, or the commencement of any such action or other proceeding, if prejudicial to its ability to defend such claim, demand, action or other proceeding, shall relieve such Indemnitor of any liability to UABRF under this Section 9 with respect thereto, but the omission so to deliver notice to Fluidigm shall not relieve it of any liability that it may have to UABRF other than under this Section 9. Fluidigm may not settle or otherwise consent to an adverse judgment in any such claim, demand, action or other proceeding, that diminishes the rights or interests of UABRF without the prior express written consent of UABRF, which consent shall not be unreasonably withheld or delayed. UABRF, its employees and agents, shall reasonably cooperate with Fluidigm and its legal representatives in the investigation of any claim, demand, action or other proceeding covered by this Section 9.

9.3 Insurance. Fluidigm shall maintain insurance with respect to the research, development and commercialization of products by Fluidigm pursuant to this Agreement in such amount as Fluidigm customarily maintains with respect to the research, development and commercialization of its similar products. Fluidigm shall maintain such insurance for so long as it continues to research, develop or commercialize any products pursuant to this Agreement, and thereafter for so long as Fluidigm customarily maintains insurance covering the research, development or commercialization of its similar products.

10. MISCELLANEOUS

10.1 Notices. Any consent, notice or report required or permitted to be given or made under this Agreement by one of the parties to the other shall be in writing and addressed to such other party at its address indicated below, or to such other address as the addressee shall

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have last furnished in writing to the addressor, and shall be effective upon receipt by the addressee.

If to UABRF: UAB Research Foundation
1120G Administration Building
704 20th Street
Birmingham, Alabama 35294
Attention: Director

If to Fluidigm: Fluidigm Corporation
7100 Shoreline Court
South San Francisco, California 94080
Attention: President

with a copy to: Fluidigm Corporation
7100 Shoreline Court
South San Francisco, California 94080
Attention: General Counsel

10.2 Assignment. Except as otherwise expressly provided under this Agreement neither this Agreement nor any right or obligation hereunder may be assigned or otherwise transferred (whether voluntarily, by operation of law or otherwise), without the prior express written consent of the other party; provided, however, that either party may, without such consent, assign this Agreement and its rights and obligations hereunder in connection with the transfer or sale of all or substantially all of its business, or in the event of its merger, consolidation, change in control or similar transaction. Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment or transfer in violation of this Section 10.2 shall be void.

10.3 Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Alabama, without regard to the conflicts of law principles thereof.

10.4 Entire Agreement. This Agreement and the Master Closing Agreement (together with the Ancillary Agreements, as defined in the Master Closing Agreement) contain the entire understanding of the parties with respect to the subject matter hereof. All express or implied representations, agreements and understandings, either oral or written, heretofore made are expressly superseded by this Agreement and the Master Closing Agreement. To the extent that any provision of this Agreement conflicts with any provision of the Sponsored Research Agreement between the parties of even date hereof ("Sponsored Research Agreement"), the applicable provision of this Agreement shall control and supersede the applicable provision of the Sponsored Research Agreement.

10.5 Independent Contractors. Each party hereby acknowledges that the parties shall be independent contractors and that the relationship between the parties shall not constitute a partnership, joint venture or agency. Neither party shall have the authority to make any

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statements, representations or commitments of any kind, or to take any action, which shall be binding on the other party, without the prior consent of the other party to do so.

10.6 Waiver. The waiver by a party of any right hereunder, or of any failure to perform or breach by the other party hereunder, shall not be deemed a waiver of any other right hereunder or of any other breach or failure by the other party hereunder whether of a similar nature or otherwise.

10.7 Force Majeure. Neither party shall be held liable or responsible to the other party nor be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any term of this Agreement to the extent, and for so long as, such failure or delay is caused by or results from causes beyond the reasonable control of the affected party including but not limited to fire, floods, embargoes, war, acts of war (whether war be declared or not), insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, acts of God or acts, omissions or delays in acting by any governmental authority or the other party.

10.8 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

UAB RESEARCH FOUNDATION

By /s/ (ILLEGIBLE)

Title Director

FLUIDIGM CORPORATION

By /s/ Gajus Worthington

Title President & CEO

Acknowledged and agreed to
this March 7, 2003.

/s/ Dr. Larry DeLucas
Dr. Larry DeLucas

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EXHIBIT A

UABRF/DSI TECHNOLOGY

[***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT B

PATENT RIGHTS

1. [***]
2. [***]
3. [***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

4. [***]

5. [***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT C

OCULUS AGREEMENT TECHNOLOGY

1. [***]
2. [***]
3. Copies of all documentation describing the foregoing, in particular, drawings, operations manuals.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

COY-15-RISC/F269-1
S05/1-25730208

27 March 2008

Ms Grace Yow
General Manager
Fluidigm Singapore Pte Ltd
Block 1026, #07-3532
Tai Seng Avenue
Singapore 534413

Dear Ms Grace Yow,

APPLICATION FOR INCENTIVES UNDER THE RESEARCH INCENTIVE SCHEME FOR COMPANIES (RISC)

This is with reference to your application of 15 June 2005 and subsequent revisions for incentives under the Research Incentive Scheme for Companies. This letter amends, restates and replaces our original letter agreement dated 7 October 2005 (the "Prior Letter"), provided that the Supplement to the Prior Letter dated 11 January 2006 (the "Supplement") shall remain in full force and effect and all references in the Supplement to the Prior Letter or LOF shall be considered references to this amended and restated letter.

2 We are pleased to inform you that the Economic Development Board (hereinafter called "EDB") has agreed to provide a grant not exceeding S$9,926,000 in total to Fluidigm Singapore Pte Ltd (hereinafter called "the

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Company") under the RISC for your project on the development of the Fluidigm R&D centre (hereinafter called the "Development Project"), as described in your application. This grant shall be subject to the following conditions:

Project Implementation

(a) The Company shall implement the Development Project as indicated in the Company's application dated 15 June 2005 and subsequent revisions.

(b) The Development Project shall meet the project milestones, deliverables and headcount commitment as shown in Annex 1 .

(c) The Company shall carry out the entire Development Project in Singapore unless otherwise stated.

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(d) The Company shall employ at least 16 Research Scientists and Engineers in Singapore by 31 December 2007.

(e) The Company shall employ at least 24 Research Scientists and Engineers in Singapore by 31 December 2009.

(f) The Company shall incur annual R&D spending of at least S$6.5 million by 31 December 2008 and at least S$8 million by 31 December 2010.

(g) The Company shall be the legal and economic owner of all intellectual property (IP) arising from this project.

(h) The Company shall engage a Singapore-based IP or legal firm(s) to file, draft and manage all patent applications arising from this project.

(i) The Company shall manufacture all products developed from this RISC project in Singapore for the lifetime of the products.

Supported Period

(j) **Only expenses incurred during the qualifying period, which shall be from 1 August 2005 to 31 July 2010, will be supported.**

Grant Support

(k) All manpower, equipment, materials & software, professional services and intellectual property rights supported under this RISC grant shall be used exclusively for the Development Project and shall follow the administrative guidelines laid out in Annex 2.

(l) The Company shall not sell, lease, dispose or otherwise transfer the equipment & software supported under this RISC grant to another party during the execution of the Development Project without first obtaining the written approval of EDB, which if so granted, shall be on such terms as EDB deems fit. The Company shall at all times maintain proper records with respect to the assets acquired through the grant.

(m) The Company shall not seek or receive funds from any other incentives offered by other agencies of the Government of Singapore for funding of this Development Project.

(n) All grant monies received shall be used solely for the implementation of this Development project.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Project Management & Co-ordination

(o) The Company shall appoint a person (hereinafter called the "Principal Investigator") to lead the Development Project. The Principal Investigator shall be responsible for the proper management, co-ordination and progress of the Development Project, the management of grants disbursed and all other matters pertaining to the Development Project, including the preparation of claims, submission of audited statements and progress reports.

(p) The Principal Investigator shall be deemed as an agent of the Company throughout the Development Project and EDB shall at all times have access to the Principal Investigator with regards to all matters pertaining to the Development Project.

(q) The Company shall inform EDB in writing of any change in the Principal Investigator.

Other Conditions

(r) The Company shall permit EDB officers to inspect the premises where the development work is carried out, the Company's accounts on the development expenditures and the records on the progress of the Development Project.

(s) The Company shall be required to provide, through responses to surveys or any other such studies carried out by EDB, relevant information on the Development Project, as and when requested by EDB.

(t) If required by EDB, the Company shall submit a report comparing its projections in the application form with the actual realised figures. The template for this report and the timeline for submission will be provided by EDB.

3 In the event the Project is aborted, the Company is to inform EDB in writing immediately.

4 EDB reserves the right to recover from the Company the total amount of grant released to the Company for any breach of condition under which the RISC grant was approved.

5 The Company shall keep the terms and conditions of this RISC grant confidential. Such information shall not be released to any external party, the public or the press unless prior written consent from EDB is given.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

6 EDB reserves the right to change the terms and conditions of this offer from time to time as may be specified and deemed necessary by EDB.

7 If you are prepared to accept this amended and restated offer of a grant under the conditions stipulated above, please sign below and return it to EDB within 1 month from the date of this letter, **failing which this offer shall be deemed to have lapsed** .

8 If you have any queries, please contact Ih-Ming CHAN at 6395 7794. For queries on claims, please call the EDAS hotline at 6832 6416. We wish you every success in this project.

Yours sincerely

DR BEH SWAN GIN
DIRECTOR
BIOMEDICAL SCIENCES CLUSTER

Enclosures:

Annex 1 Project Milestones and Deliverables

Annex 2 Administrative Guidelines

Accepted and Agreed

FLUIDIGM CORPORATION

_____

Name:
Title:

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Annex 1

PROJECT MILESTONES AND DELIVERABLES

(a) The Company shall employ at least 16 Research Scientists and Engineers in Singapore by 31 December 2007.

(b) The Company shall employ at least 24 Research Scientists and Engineers in Singapore by 31 December 2009.

(c) The Company shall incur annual R&D spending of at least S$6.5 million by 31 December 2008 and at least S$8.0 million by 31 December 2010.

(d) The Company shall be the legal and economic owner of all intellectual property (IP) arising from this project. The economic benefits resulting from the exploitation of the IP arising from this project shall accrue to the Company.

(e) The Company shall engage a Singapore-based IP or legal firm(s) to file, draft and manage all patent applications arising from this project.

(f) The Company shall manufacture all products developed from this RISC project in Singapore for the lifetime of the products.

(g) The Company shall fulfil the following project milestones as indicated below:

Milestones	Date of Completion
TOPAZ Screening Chip	
[***]	[***]
[***]	[***]
TOPAZ Next Generation Screening Chip	
[***]	[***]
[***]	[***]
[***]	[***]
TOPAZ Diffraction Chip	
[***]	[***]
[***]	[***]
[***]	[***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Milestones	Date of Completion
Dynamic Array IFCs	
[***]	[***]
[***]	[***]
[***]	[***]
Next Generation IFCs (Immunoassays, PET Synthesis, DID, Pathogen Detection)	
[***]	[***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Annex 2

ADMINISTRATIVE GUIDELINES

1. The grant shall cover 50% of the actual qualifying manpower costs and 30% of the actual qualifying costs for equipment, materials & software, professional services and intellectual property rights incurred by the Company on the Development Project during the qualifying period. In the event where qualifying cost items are not used exclusively for the Development Project, the qualifying costs items shall be suitably pro-rated. The qualifying cost items are listed below, but shall be subject to a total maximum grant of S$9,926,000. Virement from one qualifying cost item to another will not be considered and the grant shall not cover GST payments.

Category	Approved Grant (S$)
Manpower	4,675,380
Equipment, Materials and Software	4,963,380
Professional services	288,000
Total	9,926,760
Total Approved Grant (Rounded down to nearest thousand dollars)	9,926,000

2. The qualifying cost for equipment (less its residual value, if any) is pro-rated based on the number of months the equipment is used for the project (this refers to the date of delivery to the end of qualifying period) over the approved useful life of equipment.

   The qualifying cost of equipment is based on the actual expenses, residual value, number of months that the equipment is used for the project and approved useful life of equipment.

   The qualifying cost for intellectual property rights (IPR) is pro-rated based on the project duration over the approved useful life of IPR.

   The qualifying cost of IPR is based on the cost of acquiring IPR, project duration and the approved useful life of IPR.

3. Disbursements shall be made on a reimbursement basis upon application by the Company at quarterly intervals. Claims must be submitted using the prescribed forms and shall be certified by the Company's Chief Financial Officer and the Principal Investigator. The amount disbursed shall be based on the actual qualifying cost item incurred by the Company on the Development Project during the qualifying period.

   The grant will be disbursed as follows:

   (i) Disbursements of up to a cumulative total 70% of the approved grant amount shall be made upon application by the Company.

   (ii) The remaining 30% of the grant may be released upon application by the Company on completion of the Development Project.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

4. For all claims (except for the final claim), the first 50% of the amount claimed will be disbursed to the Company upon receipt of claim and the remaining 50% will be disbursed upon the completion of checks.

5. The final claim must be submitted within 6 months with complete documentation from the end of the qualifying period (31 July 2010), failing which any claim will be disqualified.

6. For total approved grant exceeding S$100,000, all claims must be externally audited. The audited statement of accounts shall be submitted on an annual basis, as well as when the Development Project is completed or terminated. The Company shall make available to its auditor this Letter of Offer and its accompanying annexes. The Company shall ensure that the external auditor forwards a copy of the audited accounts directly to EDB upon completion of the audit. In the event that the external auditor cannot issue an unqualified report, EDB shall have direct access to the external auditor to gather details with regard to the audit findings.

7. The Company shall submit progress reports to EDB at half-yearly intervals. The disbursement of any grant shall be subject to the Company achieving the project milestones as stated in the Offer Letter. The final report is to be submitted upon completion of the project.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

11 January 2006

Mr Gajus Worthington
CEO
Fluidigm Corporation
7100 Shoreline Court
South San Francisco, CA 94080

Re: Supplement to Letter Dated 7 October 2005 Relating to Application for Incentives under the Research Incentive Scheme for Companies (RISC)

Dear Gajus:

Reference is made to the Singapore Economic Development Board's ("***EDB***") Letter of Offer dated 07 October 2005 (the " ***LOF*** "), executed by EDB and relating to the application by Fluidigm Singapore Pte Ltd (" ***Fluidigm Singapore*** ") for incentives under the Research Incentive Scheme for Companies (" ***RISC*** "). Fluidigm Singapore is a subsidiary of Fluidigm Corporation, a California corporation (" ***Fluidigm Parent*** "). This letter agreement, referred to as the " ***Supplemental Agreement,*** " is and shall be construed as supplemental to the LOF and every clause of the LOF shall continue in full force and effect and be binding on the parties thereto save as expressly amended and supplemented by this Supplemental Agreement. For the avoidance of doubt, except as specifically set forth in this Supplemental Agreement, clause 4 of the LOF shall apply to any breach of conditions under which the RISC grant was approved. For purposes of this Supplemental Agreement, a " ***Business Day*** " shall refer to any day that is not a Saturday, Sunday, or statutory holiday in Singapore. Consistent with the RISC grant, this Supplemental Agreement will be deemed effective as of 1 August 2005.

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, EDB, Fluidigm Singapore, and Fluidigm Parent agree as follows:

1. In addition to and based on the milestones and deliverables identified in Paragraph 2 and Annex 1 of the LOF, Fluidigm Singapore shall be required throughout the project development period, commencing from 1 January 2006, to furnish to EDB annually, quarterly milestones and deliverables for the forthcoming year in accordance with the relevant milestones and deliverables identified in Paragraph 2 and Annex 1 of the LOF (the " ***New Milestone List*** "). EDB shall be entitled to accept or reject such milestones and deliverables in accordance with paragraph 5 below. Fluidigm Singapore shall deliver the New Milestone List on or before January 31 of each year.

2. Fluidigm Singapore shall deliver to EDB on a quarterly basis evidence of the satisfaction of previously identified objective milestones and deliverables (as set forth in a New Milestone List) for the entire prior fiscal period of Fluidigm Parent (the " ***Quarterly Update Reports*** "). Quarterly Update Report submission shall take place no later than the fifth (5th) Business Day after the end of each fiscal quarter and shall include Fluidigm Singapore's claims

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[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

for the entire prior fiscal quarter. The Quarterly Update Reports must be in sufficient detail to satisfy EDB that the milestones and deliverables identified in the applicable New Milestone List have been met. Scheduled quarterly update meetings or teleconference calls arranged between Fluidigm Singapore and EDB to review the progress of the development project will be held in advance of Quarterly Update Report submission.

3. If EDB objects to or otherwise disagrees with the conclusion of Fluidigm Singapore and Fluidigm Parent that the Quarterly Update Report evidences satisfaction in full of the milestones and deliverables previously identified in the New Milestone List for the period covered by such Quarterly Update Report, then EDB shall deliver a written notice to Fluidigm Singapore and Fluidigm Parent stating its objections or disagreement (" ***Notice of Objection*** "). In the event that EDB delivers a Notice of Objection, EDB, Fluidigm Singapore, and Fluidigm Parent will act in good faith to promptly resolve any such objection or disagreement. Fluidigm Singapore and Fluidigm Parent shall deliver to EDB a revised Quarterly Update Report which is satisfactory to EDB on or before the fifteenth (15 th) calendar day after the end of the fiscal quarter. If EDB is satisfied with the progress of the milestone completion and project achievements as set out in the Quarterly Update Reports, EDB will qualify in writing the company's quarterly claims for that quarter and limit its right of recovery set forth in paragraph 4 of the LOF to [***] of the qualified claim amount for that quarterly fiscal period.

4. EDB, Fluidigm Parent, and Fluidigm Singapore agree that Fluidigm may elect to conduct the audits contemplated pursuant to paragraph 2, subsection (t) of the LOF on a half-yearly (i.e., every six months) rather than on an annual basis. In the event that any such audit reveals inaccuracies or errors that would have resulted in a recovery pursuant to paragraph 4 of the LOF, EDB may effect such recovery, in all events subject to the [***] limitation set forth in paragraph 3 above, directly from Fluidigm Singapore or, at EDB's election, as an off-set against future reimbursements. EDB will fully qualify in writing the company's quarterly claim only upon the company's subsequent half-yearly submission of externally audited claims for the quarterly period(s) concerned and satisfactory verification by EDB.

5. On or before the tenth (10th) Business Day following delivery of the New Milestone List, EDB shall deliver written notice (***"Notice of Objection on Milestone List*** ") to Fluidigm Singapore and Fluidigm Parent if EDB objects to or otherwise disagrees with the objective milestones and deliverables identified in any New Milestone List. In the event that EDB delivers a Notice of Objection on Milestone List within the prescribed period, EDB, Fluidigm Singapore, and Fluidigm Parent will act in good faith to promptly resolve any such objection or disagreement. Fluidigm Singapore and Fluidigm Parent shall, within ten (10) Business Days of the date of the Notice of Objection on Milestone List, deliver to EDB a New Milestone List which is satisfactory to EDB.

6. in the event of (i) fraud by Fluidigm Singapore or Fluidigm Parent or (ii) any intentional misrepresentation of a material fact by Fluidigm Singapore or Fluidigm Parent, in either case relating to Fluidigm Singapore's performance of the activities contemplated by the development project, then the limitations set forth in this Supplemental Agreement (including,

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

without limitation, paragraph 3 of this Supplemental Agreement) on EDB's right of recovery under paragraph 4 of the LOF shall not apply and EDB reserves the right to full recovery of any disbursed grant monies.

7. Neither the LOF nor this Supplemental Agreement may be amended or modified, nor may any provision of the LOF or this Supplemental Agreement be waived, except with the written consent of EDB, Fluidigm Singapore, and Fluidigm Parent or in the case of a waiver, the written consent of the party giving such waiver. Except to the extent the LOF is supplemented, amended, or superseded pursuant to this Supplemental Agreement, the LOF shall remain in full force and effect in accordance with its terms.

Yours Sincerely,

/s/ Dr Beh Swan Gin

Dr Beh Swan Gin
Director
Biomedical Sciences
EDB

Economic Development Board
250 North Bridge Road, #28-00 Raffles City Tower, Singapore 179101. Tel: 65 6832 6832 Fax: 65 6832 6565
www.sedb.com

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

COY-15-RISC/F269-1
S05/1-25730208

Chairman
Economic Development Board
250 North Bridge Road
#28-00 Raffles City Tower
Singapore 179101

Attention: DR BEH SWAN GIN

ACCEPTANCE OF SUPPLEMENTAL AGREEMENT TO THE LOF DATED 7 OCT 2005 PERTAINING TO RESEARCH INCENTIVE SCHEME FOR COMPANIES

1 I refer to your LOF dated 7 October 2005 and the Supplemental Agreement to the LOF dated 11 January 2006.

2 I confirm that my company will be undertaking the development project as submitted to the Board dated 15 June 2005 and subsequent revisions and that we accept the award of your grant not exceeding S$9,926,000 in aggregate, subject to the terms and conditions set out in the LOF dated 7 October 2005 and the above mentioned Supplemental Agreement to the LOF.

3 We understand the need for EDB to ensure good governance of public fund and hence will ensure that all claims for reimbursement of project expenditure are true and correct and all terms and conditions as set out in the LOF dated 7 October 2005 and the above mentioned Supplemental Agreement are complied with.

Signature : /s/ Gajus Worthington
Mr Gajus Worthington/ CEO Fluidigm Corporation

Signature : /s/ Grace Yow
Name:
Ms Grace Yow / General Manager

Company Stamp :

Fluidigm Singapore Pte Ltd

Date :

Economic Development Board
250 North Bridge Road, #28-00 Raffles City Tower, Singapore 179101. Tel: 65 6832 6832 Fax: 65 6832 6565
www.sedb.com

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 10.13

COY-15-RISC/F269-2
S06/1-39831633

27 March 2008

Ms Grace Yow
General Manager
Fluidigm Singapore Pte Ltd
Block 1026, #07-3532
Tai Seng Avenue
Singapore 534413

Dear Ms Grace Yow,

APPLICATION FOR INCENTIVES UNDER THE RESEARCH INCENTIVE SCHEME FOR COMPANIES (RISC)

This is with reference to your application of 26 March 2006 and subsequent revisions for incentives under the Research Incentive Scheme for Companies. This letter amends, restates and replaces our original letter agreement dated 12 February 2007 (the "Prior Letter") and all references in the Prior Letter shall be considered references to this amended and restated letter.

2 We are pleased to inform you that the Economic Development Board (hereinafter called "EDB") has agreed to provide a grant not exceeding S$3,715,000 in total to Fluidigm Singapore Pte Ltd (hereinafter called "the Company") under the RISC for your project on the development of the Fluidigm Instrumentation R&D Project (hereinafter called the "Development Project"), as described in your application. This grant shall be subject to the following conditions:

Project Implementation

a) The Company shall implement the Development Project as follows:

(i) The Company shall implement the Development Project as indicated in the Company's application dated 26 March 2006 and subsequent revisions.

(ii) The Company shall manufacture all products developed from the Development Project in Singapore for the lifetime of the products.

(iii) The Company shall be the legal and economic owner of all intellectual property (IP) arising from the Development Project.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(iv) The Company shall engage a Singapore-based IP or legal firm(s) to file, draft and manage all patent applications arising from the Development Project.

(v) The Company shall employ at least 10 new Research Scientists and Engineers (RSEs) in Singapore by 31 May 2009 for the Development Project.

(vi) The Company shall employ at least 12 new RSEs in Singapore by 31 May 2011 for the Development Project.

(vii) The Company shall incur total annual R&D spending of at least S$6.5 million by 31 May 2009 for the Development Project.

(viii) The Company shall incur total annual R&D spending of at least S$9 million by 31 May 2011 for the Development Project.

(ix) The Company shall maintain at least 12 RSEs in total at its R&D Centre in Singapore until 31 May 2013.

(x) Fluidigm Corporation shall raise a minimum of US $45 million in new funding between 1 Jan 2006 and 31 Dec 2008.

(xi) The Development Project shall meet the project milestones and deliverables as shown in Annex 1.

b) The Company shall carry out the entire Development Project in Singapore unless otherwise stated.

Supported Period

c) Only expenses incurred during the qualifying period, which shall be from 1 June 2006 to 31 May 2011, will be supported.

Grant Support

d) All manpower, equipment, materials & software, professional services and intellectual property rights supported under this RISC grant shall be used exclusively for the Development Project and shall follow the administrative guidelines laid out in Annex 2.

e) The Company shall not sell, lease, dispose or otherwise transfer the equipment & software supported under this RISC grant to another party during the execution of the Development Project without first obtaining the written approval of EDB, which if so granted, shall be on such terms as EDB deems fit. The Company shall at all times maintain proper records with respect to the assets acquired through the grant.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

f) The Company shall not seek or receive funds from any other incentives offered by other agencies of the Government of Singapore for funding of this Development Project.

g) All grant monies received shall be used solely for the implementation of this Development project.

Project Management & Co-ordination

h) The Company shall appoint a person (hereinafter called the "Principal Investigator") to lead the Development Project. The Principal Investigator shall be responsible for the proper management, co-ordination and progress of the Development Project, the management of grants disbursed and all other matters pertaining to the Development Project, including the preparation of claims, submission of audited statements and progress reports.

i) The Principal Investigator shall be deemed as an agent of the Company throughout the Development Project and EDB shall at all times have access to the Principal Investigator with regards to all matters pertaining to the Development Project.

j) The Company shall inform EDB in writing of any change in the Principal Investigator.

Other Conditions

k) The Company shall permit EDB officers to inspect the premises where the development work is carried out, the Company's accounts on the development expenditures and the records on the progress of the Development Project.

l) The Company shall be required to provide, through responses to surveys or any other such studies carried out by EDB, relevant information on the Development Project, as and when requested by EDB.

m) If required by EDB, the Company shall submit a report comparing its projections in the application form with the actual realised figures. The template for this report and the timeline for submission will be provided by EDB.

3 In the event the Project is aborted, the Company is to inform EDB in writing immediately.

4 EDB reserves the right to recover from the Company the total amount of grant released to the Company for any breach of condition under which the RISC grant was approved.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

5 The Company shall keep the terms and conditions of this RISC grant confidential. Such information shall not be released to any external party, the public or the press unless prior written consent from EDB is given.

6 EDB reserves the right to change the terms and conditions of this offer from time to time as may be specified and deemed necessary by EDB.

7 If you are prepared to accept this amended and restated offer of a grant under the conditions stipulated above, please sign below and return it to EDB within 1 month from the date of this letter, **failing which this offer shall be deemed to have lapsed** .

8 If you have any queries, please contact Ih-Ming CHAN at 6395 7794. For queries on claims, please call the EDAS hotline at 6832 6416. We wish you every success in this project.

Yours sincerely

YEOH KEAT CHUAN
EXECUTIVE DIRECTOR
BIOMEDICAL SCIENCES CLUSTER

Enclosures:

Annex 1 Project Milestones and Deliverables

Annex 2 Administrative Guidelines

Accepted and Agreed

FLUIDIGM CORPORATION

/s/ Gajus Worthington
Name: Gajus Worthington
Title: President & CEO

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Annex 1

PROJECT MILESTONES AND DELIVERABLES

The Company shall meet the following R&D milestones:

Milestones	Completion Date
AIX Gen II development	
[***]	[***]
[***]	[***]
BioMark II Chip Loader development	
[***]	[***]
[***]	[***]
[***]	[***]
BioMark II End Point Reader development	
[***]	[***]
[***]	
[***]	[***]
BioMark Next Generation Instrument Development	
[***]	[***]
[***]	[***]
[***]	[***]

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Annex 2

ADMINISTRATIVE GUIDELINES

1. The grant shall cover 50% of the actual qualifying manpower costs and 30% of the actual qualifying costs for equipment, materials & software, professional services and intellectual property rights incurred by the Company on the Development Project during the qualifying period. In the event where qualifying cost items are not used exclusively for the Development Project, the qualifying costs items shall be suitably pro-rated. The qualifying cost items are listed below, but shall be subject to a total maximum grant of S$3,715,000. Virement from one qualifying cost item to another will not be considered and the grant shall not cover GST payments.

Category	Approved Grant (S$)
Manpower	2,093,592
Equipment, Materials and Software	1,188,672
Professional services	433,500
Total	3,715,764
Total Approved Grant (Rounded down to nearest thousand dollars)	**3,715,000**

2. The qualifying cost for equipment (less its residual value, if any) is pro-rated based on the number of months the equipment is used for the project (this refers to the date of delivery to the end of qualifying period) over the approved useful life of equipment.

   The qualifying cost of equipment is based on the actual expenses, residual value, number of months that the equipment is used for the project and approved useful life of equipment.

   The qualifying cost for intellectual property rights (IPR) is pro-rated based on the project duration over the approved useful life of IPR.

   The qualifying cost of IPR is based on the cost of acquiring IPR, project duration and the approved useful life of IPR.

3. Disbursements shall be made on a reimbursement basis upon application by the Company at quarterly intervals. Claims must be submitted using the prescribed forms and shall be certified by the Company's Chief Financial Officer and the Principal Investigator. The amount disbursed shall be based on the actual qualifying cost item incurred by the Company on the Development Project during the qualifying period.

   The grant will be disbursed as follows:

   (i) Disbursements of up to a cumulative total 70% of the approved grant amount shall be made upon application by the Company.

   (ii) The remaining 30% of the grant may be released upon application by the Company on completion of the Development Project.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

4. For all claims (except for the final claim), the first 50% of the amount claimed will be disbursed to the Company upon receipt of claim and the remaining 50% will be disbursed upon the completion of checks.

5. The final claim must be submitted within 6 months with complete documentation from the end of the qualifying period (31 May 2011), failing which any claim will be disqualified.

6. For total approved grant exceeding S$100,000, all claims must be externally audited. The audited statement of accounts shall be submitted on an annual basis, as well as when the Development Project is completed or terminated. The Company shall make available to its auditor this Letter of Offer and its accompanying annexes. The Company shall ensure that the external auditor forwards a copy of the audited accounts directly to EDB upon completion of the audit. In the event that the external auditor cannot issue an unqualified report, EDB shall have direct access to the external auditor to gather details with regard to the audit findings.

7. The Company shall submit progress reports to EDB at half-yearly intervals. The disbursement of any grant shall be subject to the Company achieving the project milestones as stated in the Offer Letter. The final report is to be submitted upon completion of the project.

[***] Information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 10.14

FLUIDIGM CORPORATION

EMPLOYMENT AND SEVERANCE AGREEMENT

This Change of Control Severance Agreement (the "Agreement") is made and entered into by and between [_____] ("Executive") and Fluidigm Corporation (the "Company"), effective as of **[DATE]** (the "Effective Date").

RECITALS

WHEREAS, it is expected that the Company from time to time will consider the possibility of an acquisition by another company or other Change of Control (as defined herein). The Board of Directors of the Company (the "Board") recognizes that such consideration can be a distraction to Executive and can cause Executive to consider alternative employment opportunities.

WHEREAS, the Board believes that it is in the best interests of the Company and its stockholders to provide Executive with an incentive to continue his or her employment to motivate Executive to maximize the value of the Company upon a Change of Control for the benefit of its stockholders.

WHEREAS, the Board believes that it is in the best interests of the Company and its stockholders to provide Executive with certain severance benefits upon Executive's termination of employment without cause or upon a constructive termination following a Change of Control of the Company and to provide Executive with certain severance benefits upon Executive's termination of employment without cause outside of the change of control context, in order to provide Executive with enhanced financial security and incentive to remain with the Company.

WHEREAS, certain capitalized terms used in the Agreement are defined in Section 6 below.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, the parties hereto agree as follows:

1. Term of Agreement. This Agreement will terminate upon the date that all of the obligations of the parties hereto with respect to this Agreement have been satisfied.

2. At-Will Employment. The Company and Executive acknowledge that Executive's employment is and will continue to be at-will, as defined under applicable law, except as may otherwise be specifically provided under the terms of a written formal employment agreement, if any, between the Company and Executive (an "Employment Agreement"). As provided in Section 3(f) below, Executive will be entitled to no benefits, compensation or other payments or rights upon termination of employment other than those benefits expressly set forth in this Agreement.

3. Severance Benefits.

(a) Termination without Cause Prior to a Change of Control or After Twelve Months Following a Change of Control. If prior to a Change of Control or after twelve (12) months following a Change of Control, the Company (or any parent or subsidiary or successor of the Company) terminates Executive's employment without Cause, and, in each case, Executive signs and does not revoke a standard release of claims with the Company in a form acceptable to the Company, then Executive will receive, in addition to Executive's salary payable through the date of termination of employment and any other employee benefits earned and owed through the date of termination, the following severance from the Company:

(i) Severance Payment. As provided in Section 3(c) below, six (6) months severance pay (less applicable withholding taxes) equal to the pro-rata portion of Executive's base salary (as in effect immediately prior to Executive's termination).

(ii) Continued Employee Benefits. Reimbursement for a period of up to six (6) months (less applicable withholding taxes, if any) for the costs and expenses incurred by Executive and/or Executive's eligible dependents for coverage under the Company's Benefit Plans, provided that such coverage is timely elected under the Consolidated Omnibus Budget Reconciliation Act of 1985 or similar applicable state statute ("COBRA").

(b) Constructive Termination or Termination without Cause Following a Change of Control. If within twelve (12) months following a Change of Control (i) Executive terminates his or her employment with the Company (or any parent or subsidiary or successor of the Company) for Good Reason, or (ii) the Company (or any parent or subsidiary or successor of the Company) terminates Executive's employment without Cause, and, in each case, Executive signs and does not revoke a standard release of claims with the Company in a form acceptable to the Company, then Executive will receive, in addition to Executive's salary payable through the date of termination of employment and any other employee benefits earned and owed through the date of termination, the following severance from the Company:

(i) Severance Payment. As provided in Section 3(c) below, six (6) months severance pay (less applicable withholding taxes) equal to the pro-rata portion of Executive's base salary (as in effect immediately prior to (A) the Change of Control, or (B) Executive's termination, whichever is greater).

(ii) Accelerated Vesting of Options; Restricted Stock. Then-outstanding and unvested stock options in Company common stock, stock appreciation rights and similar equity awards held by Executive ("Options") will immediately vest and become exercisable as to an all shares underlying such Options. The Options will remain exercisable following the termination for the period prescribed in the respective option agreement, which will not extend past the term of each Option. Additionally, any shares of restricted stock, restricted stock units and similar equity awards ("Restricted Stock") then-held by Executive will immediately vest and the applicable Company right of repurchase or reacquisition with respect to such shares of Restricted Stock will lapse as to all such shares.

(iii) Continued Employee Benefits. Reimbursement for a period of up to six (6) months (less applicable withholding taxes, if any) for the costs and expenses incurred by Executive and/or Executive's eligible dependents for coverage under the Company's Benefit Plans, provided that such coverage is timely elected under COBRA.

(c) Timing of Severance Payments. The Company will pay the severance payments to which Executive is entitled under Section 3(a)(i) above as salary continuation on the same basis and timing as in effect immediately prior to the termination and the Company will pay the severance payments to which Executive is entitled under Section 3(b)(i) in a lump sum. If Executive should die before all amounts have been paid, such unpaid amounts will be paid in a lump sum payment (less any withholding taxes) to Executive's spouse, designated beneficiary, or otherwise to the personal representative of Executive's estate.

(d) Voluntary Resignation; Termination For Cause. If Executive's employment with the Company terminates (i) voluntarily by Executive (except upon a termination for Good Reason within twelve (12) months of a Change of Control), or (ii) for Cause by the Company (or any parent or subsidiary or successor of the Company), then Executive will not be entitled to receive any severance benefits and the sole obligation of the Company shall be to pay to Executive, an amount equal to Executive's base salary payable through the date of termination of employment and any other employee benefits earned and owed through the date of termination.

(e) Disability; Death. If the Company terminates Executive's employment as a result of Executive's Disability, or Executive's employment terminates due to his or her death, then Executive will not be entitled to receive severance benefits and the sole obligation of the Company shall be to pay to Executive an amount equal to Executive's base salary payable to the date of termination of employment and any other employee benefits earned and owed through the date of termination to Executive, Executive's spouse, designated beneficiary, or otherwise to the personal representative of Executive's estate, as the case may be.

(f) Exclusive Remedy. In the event of a termination of Executive's employment with the Company (or any parent or subsidiary or successor of the Company), the provisions of this Section 3 are intended to be and are exclusive and in lieu of any other rights or remedies to which Executive or the Company may otherwise be entitled, whether at law, tort or contract, in equity, or under this Agreement. Executive will be entitled to no benefits, compensation or other payments or rights upon termination of employment other than those benefits expressly set forth in this Section 3.

(g) Section 409A. Notwithstanding anything to the contrary in this Agreement, if Executive is a "specified employee" within the meaning of Section 409A of the Code and any final regulations and guidance promulgated thereunder ("Section 409A") at the time of Executive's termination, then only that portion of the severance and benefits payable to Executive pursuant to this Agreement (other than due to death), if any, and any other severance payments or separation benefits which may be considered deferred compensation under Section 409A (together, the "Deferred Compensation Separation Benefits"), which (when considered together) do not exceed the

Section 409A Limit (as defined below) may be made within the first six (6) months following Executive's termination of employment in accordance with the payment schedule applicable to each payment or benefit. Any portion of the Deferred Compensation Separation Benefits in excess of the Section 409A Limit otherwise due to Executive on or within the six (6) month period following Executive's termination will accrue during such six (6) month period and will become payable in a lump sum payment on the date six (6) months and one (1) day following the date of Executive's termination of employment or the date of Executive's death if earlier. All subsequent Deferred Compensation Separation Benefits, if any, will be payable in accordance with the payment schedule applicable to each payment or benefit. The foregoing provisions are intended to comply with the requirements of Section 409A so that none of the severance payments and benefits to be provided hereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply. The Company and Executive agree to work together in good faith to consider amendments to this Agreement and to take such reasonable actions which are necessary, appropriate or desirable to avoid imposition of any additional tax or income recognition prior to actual payment to Executive under Section 409A.

For purposes of this Agreement, "Section 409A Limit" will mean the lesser of two (2) times: (i) Executive's annualized compensation based upon the annual rate of pay paid to Executive during the Company's taxable year preceding the Company's taxable year of Executive's termination of employment as determined under Treasury Regulation 1.409A-1(b)(9)(iii)(A)(1) and any Internal Revenue Service guidance issued with respect thereto; or (ii) the maximum amount that may be taken into account under a qualified plan pursuant to Section 401(a)(17) of the Code for the year in which Executive's employment is terminated.

4. Limitation on Payments. In the event that the severance and other benefits provided for in this Agreement or otherwise payable to Executive (i) constitute "parachute payments" within the meaning of Section 280G of the Code and (ii) but for this Section 4, would be subject to the excise tax imposed by Section 4999 of the Code, then Executive's severance benefits under Section 4(a)(i) will be either:

(a) delivered in full, or

(b) delivered as to such lesser extent which would result in no portion of such severance benefits being subject to excise tax under Section 4999 of the Code,

whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, results in the receipt by Executive on an after-tax basis, of the greatest amount of severance benefits, notwithstanding that all or some portion of such severance benefits may be taxable under Section 4999 of the Code. Unless the Company and Executive otherwise agree in writing, any determination required under this Section 4 will be made in writing by the Company's independent public accountants immediately prior to Change of Control (the "Accountants"), whose determination will be conclusive and binding upon Executive and the Company for all purposes. For purposes of making the calculations required by this Section 4, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and Executive will furnish to the Accountants

such information and documents as the Accountants may reasonably request in order to make a determination under this Section. The Company will bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this Section 4.

5. Definition of Terms. The following terms referred to in this Agreement will have the following meanings:

(a) Benefit Plans. For purposes of this Agreement, "Benefit Plans" means the group health plans, policies or arrangements that the Company sponsors (or participates in) and that immediately prior to Executive's termination of employment provide Executive and/or Executive's eligible dependents with medical, dental, and/or vision benefits. Benefit Plans do not include any other type of benefit (including, but not by way of limitation, disability, life insurance or retirement benefits). A requirement that the Company provide Executive and Executive's eligible dependents with coverage under the Benefit Plans will not be satisfied unless the coverage is no less favorable than that provided to senior executives of the Company at any applicable time during the period Executive is entitled to receive severance pursuant to Section 3. The Company may, at its option, satisfy any requirement that the Company provide coverage under any Benefit Plan by providing coverage under a separate plan or plans providing coverage that is no less favorable or by paying Executive a lump sum payment which is, on an after-tax basis, sufficient to provide Executive and Executive's eligible dependents with equivalent coverage under a third-party plan that is reasonably available to Executive and Executive's eligible dependents.

(b) Cause. "Cause" is defined as (i) an act of dishonesty made by Executive in connection with Executive's responsibilities as an employee, (ii) Executive's conviction of, or plea of nolo contendere to, a felony or any crime involving fraud, embezzlement or any other act of moral turpitude, (iii) Executive's gross misconduct, (iv) Executive's unauthorized use or disclosure of any proprietary information or trade secrets of the Company or any other party to whom Executive owes an obligation of nondisclosure as a result of Executive's relationship with the Company; (v) Executive's willful breach of any obligations under any written agreement or covenant with the Company; or (vi) Executive's continued failure to perform his employment duties after Executive has received a written demand of performance from the Company with specifically sets forth the factual basis for the Company's belief that Executive has not substantially performed his duties and has failed to cure such non-performance to the Company's satisfaction within 10 business days after receiving such notice.

(c) Change of Control. "Change of Control" of the Company is defined as:

(i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) is or becomes the "beneficial owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power represented by the Company's then outstanding voting securities; or

(ii) a change in the composition of the Board occurring within a two-year period, as a result of which fewer than a majority of the directors are Incumbent Directors. "Incumbent Directors" will mean directors who either (A) are directors of the Company as of the date hereof, or (B) are elected, or nominated for election, to the Board with the affirmative votes of

at least a majority of the Incumbent Directors at the time of such election or nomination (but will not include an individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of directors to the Company); or

(iii) the date of the consummation of a merger or consolidation of the Company with any other corporation that has been approved by the stockholders of the Company, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation, or the stockholders of the Company approve a plan of complete liquidation of the Company; or

(iv) the date of the consummation of the sale or disposition by the Company of all or substantially all the Company's assets.

(d) Disability. "Disability" will mean that Executive has been unable to perform his Company duties as the result of his incapacity due to physical or mental illness, and such inability, at least twenty-six (26) weeks after its commencement, is determined to be total and permanent by a physician selected by the Company or its insurers and acceptable to Executive or Executive's legal representative (such Agreement as to acceptability not to be unreasonably withheld). Termination resulting from Disability may only be effected after at least 30 days' written notice by the Company of its intention to terminate Executive's employment. In the event that Executive resumes the performance of substantially all of his duties hereunder before the termination of his employment becomes effective, the notice of intent to terminate will automatically be deemed to have been revoked.

(e) Good Reason. "Good Reason" means the occurrence of one or more of the following events effected without Executive's prior consent, provided Executive terminates Executive's employment with the Company within one (1) year following the initial existence of the "Good Reason" condition (discussed below): (i) the assignment to Executive of any duties or the reduction of Executive's duties, either of which results in a material diminution in Executive's position or responsibilities with the Company; provided that, it being understood that the continuance of Executive's duties and responsibilities at the subsidiary or divisional level following a Change of Control, rather than at the parent, combined or surviving company level following such Change of Control shall not be deemed Good Reason within the meaning of this clause (i); (ii) a material reduction by the Company in the base salary of Executive; (iii) a material change in the geographic location at which Executive must perform services (for purposes of this Agreement, the relocation of Executive to a facility or a location less than 50 miles from Executive's then-present location shall not be considered a material change in geographic location); or (iv) any material breach by the Company of any material provision of this Agreement. Executive will not resign for Good Reason without first providing the Company with written notice of the acts or omissions constituting the grounds for "Good Reason" within ninety (90) days of the initial existence of the grounds for "Good Reason" and a reasonable cure period of not less than thirty (30) days following the date of such notice.

6. Successors.

(a) The Company's Successors. Any successor to the Company (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets will assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under this Agreement, the term "Company" will include any successor to the Company's business and/or assets which executes and delivers the assumption agreement described in this Section 6(a) or which becomes bound by the terms of this Agreement by operation of law.

(b) Executive's Successors. The terms of this Agreement and all rights of Executive hereunder will inure to the benefit of, and be enforceable by, Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

(c) Assumption. It shall be considered a material breach of the Agreement if the Company fails to obtain the assumption of this Agreement by any successor to the Company.

7. Notice.

(a) General. Notices and all other communications contemplated by this Agreement will be in writing and will be deemed to have been duly given when personally delivered or when mailed by U.S. registered or certified mail, return receipt requested and postage prepaid. In the case of Executive, mailed notices will be addressed to him or her at the home address which he or she most recently communicated to the Company in writing. In the case of the Company, mailed notices will be addressed to its corporate headquarters, and all notices will be directed to the attention of its President.

(b) Notice of Termination. Any termination by the Company for Cause or by Executive for Good Reason or as a result of a voluntary resignation will be communicated by a notice of termination to the other party hereto given in accordance with Section 7(a) of this Agreement. Such notice will indicate the specific termination provision in this Agreement relied upon, will set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination under the provision so indicated, and will specify the termination date (which will be not more than thirty (30) days after the giving of such notice). The failure by Executive to include in the notice any fact or circumstance which contributes to a showing of Good Reason will not waive any right of Executive hereunder or preclude Executive from asserting such fact or circumstance in enforcing his or her rights hereunder.

8. Miscellaneous Provisions.

(a) No Duty to Mitigate. Executive will not be required to mitigate the amount of any payment contemplated by this Agreement, nor will any such payment be reduced by any earnings that Executive may receive from any other source.

(b) Waiver. No provision of this Agreement will be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by Executive and by an authorized officer of the Company (other than Executive). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party will be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) Headings. All captions and section headings used in this Agreement are for convenient reference only and do not form a part of this Agreement.

(d) Entire Agreement. This Agreement, together with any Employment Agreement, constitutes the entire agreement of the parties hereto and supersedes in their entirety all prior representations, understandings, undertakings or agreements (whether oral or written and whether expressed or implied) of the parties with respect to the subject matter hereof.

(e) Choice of Law. The validity, interpretation, construction and performance of this Agreement will be governed by the laws of the State of California (with the exception of its conflict of laws provisions).

(f) Severability. The invalidity or unenforceability of any provision or provisions of this Agreement will not affect the validity or enforceability of any other provision hereof, which will remain in full force and effect.

(g) Withholding. All payments made pursuant to this Agreement will be subject to withholding of applicable income and employment taxes.

(h) Counterparts. This Agreement may be executed in counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year set forth below.

COMPANY

FLUIDIGM CORPORATION

By: _____

Title: _____

EXECUTIVE

By: _____

Title: _____

Exhibit 10.15

EMPLOYEE LOAN AGREEMENT

THIS EMPLOYEE LOAN AGREEMENT (the "Agreement") is entered into as of January 20, 2004, by and between Fluidigm Corporation, a California corporation (the "Lender"), and Gajus V. Worthington ("Borrower").

RECITALS

A. Borrower is employed by the Lender as its Chief Executive Officer and President.

B. The Lender and Borrower desire that the Lender lend to Borrower the sum of Two Hundred Fifty Thousand Dollars ($250,000.00) for the purposes described in Section 1 below.

C. Borrower owns 2,447,000 shares of the Common Stock of the Lender, of which 833,334 shares, together with the other collateral described in the Stock Pledge Agreement, shall constitute security for the Loan (as defined below).

NOW, THEREFORE, the Lender and Borrower agree as follows:

AGREEMENT

1. PAYMENT: The Lender will lend to Borrower the amount of Two Hundred Fifty Thousand Dollars ($250,000.00) (the "Loan"), such Loan to be made for the purposes of assisting Borrower to pay any costs, fees, or expenses (including, without limitation, purchase consideration, broker's or agents commissions, mortgage points, closing costs, or similar costs or expenses) associated with Borrower's purchase of a principal residence in the San Francisco Bay Area (the "Property") and/or any improvements or other modifications made to any Property so purchased.

2. CONDITIONS PRECEDENT: The Lender's obligation to extend the Loan to Borrower pursuant to this Agreement is expressly conditioned upon the satisfaction of or waiver by the Lender of all of the following conditions precedent, each of which is exclusively for the benefit of the Lender:

2.1 Borrower shall have delivered to the Lender each of the following (herein collectively referred to as "Loan Documents"):

(a) One (1) original promissory note in the amount of Two Hundred Fifty Thousand Dollars ($250,000.00) in substantially the same form as Exhibit A attached hereto (the "Note"), with all uncompleted information fully completed;

(b) One (1) fully executed, validly acknowledged Stock Pledge Agreement, providing for the pledge of 833,334 shares of Common Stock of the Lender and certain other collateral as security for the Note (collectively, the "Pledged Collateral"), in substantially the same form as Exhibit B attached hereto, with all uncompleted information fully completed (the "Stock Pledge Agreement");

(c) Two (2) fully executed Stock Powers and Assignments Separate From Certificate attached as a part of Exhibit B hereto, with all uncompleted information fully completed, unless otherwise indicated thereon (the "Stock Power");

(d) All certificates representing the securities that constitute Pledged Collateral as of the date of the closing of the Loan; and

(e) Two (2) fully executed Spousal Consents, in substantially the same form as Exhibit C attached hereto, with all uncompleted information fully completed (the "Spousal Consent").

3. BORROWER'S REPRESENTATIONS AND WARRANTIES: Borrower hereby makes the following representations and warranties to the Lender, which representations and warranties shall be true and correct as of the date hereof and as of the date of the closing of the Loan, and Borrower acknowledges that the Lender is relying on such representations in making the Loan:

3.1 The Borrower has good and marketable title to the Pledged Collateral free and clear of any security interests, liens or encumbrances other than (i) joint ownership of the Pledged Collateral with Borrower's spouse, and (ii) a right of first refusal and certain repurchase rights in favor of Lender. All of the shares that constitute Pledged Collateral are fully vested.

3.2 Other than the consent of Borrower's spouse and the Lender, the consent of no other person or entity is required to grant the Lender the security interest in the Pledged Collateral.

3.3 There are no actions, proceedings, claims or disputes pending or, to Borrower's knowledge, threatened against or affecting Borrower, the Pledged Collateral, or any other properties of Borrower.

4. BORROWER'S ADDITIONAL OBLIGATIONS: Borrower shall take any and all further actions that may from time to time be required to ensure that the Stock Pledge Agreement creates a security interest in favor of the Lender, which shall secure the Note. Borrower shall not sell, hypothecate or otherwise dispose of any interest in the Pledged Collateral and shall not encumber the Pledged Collateral or permit any lien to encumber the Pledged Collateral.

5. REPAYMENT OF LOAN: Borrower shall pay to the Lender the outstanding principal balance of the Note, together with all accrued, but unpaid interest thereon, and all other sums due hereunder, under the Note, the Stock Pledge Agreement or under any other document executed by Borrower in connection herewith in accordance with the terms and conditions of this Agreement, the Note, the Stock Pledge Agreement or such other document.

6. MATURITY EVENT: The Note shall immediately become due and payable, without notice or demand, upon the earlier to occur of January 20, 2011 or the occurrence of any "Maturity Event" as defined in the Note.

7. INTEREST PAYABLE BY BORROWER: Interest shall accrue on the unpaid principal amounts of the Note at the rate specified in the Note.

8. ENTIRE AGREEMENT: This Agreement, together with the Loan Documents, constitutes the full and entire understanding and agreement between the parties hereto with regard to the subject matter hereof.

9. NO COVENANT FOR EMPLOYMENT OR ADVANCES: Borrower understands and acknowledges that neither this Agreement nor any other Loan Document modifies Borrower's at-will status at the Lender and does not constitute an employment agreement or a promise by the Lender to continue Borrower's employment. Either the Lender or Borrower may terminate such employment relationship at any time, with or without cause.

10. NOTICES: All notices and other communications required or permitted hereunder shall be in writing and may be given by (a) personal delivery, (b) certified mail, postage prepaid, return-receipt requested, (c) courier service, fully prepaid for next business day delivery, or (d) facsimile. Any such notice shall be properly addressed to the address of the parties set forth on the signature page hereof and shall be deemed to have been given (i) if personally delivered, when delivered, (ii) if by certified mail, return-receipt requested, when delivered or refused, (iii) if by courier service, on the next business day following deposit, cost prepaid, with Federal Express or similar private carrier, or (iv) if by facsimile, instantaneously upon confirmation of receipt of facsimile. The Lender or Borrower may change their respective addresses by giving notice of the same in accordance with this paragraph. The term "business day" shall mean a day on which national banks are open for business in San Francisco, California.

11. ASSIGNMENT: Borrower may not assign any of his rights and/or duties under this Agreement (or any other Loan Document) without the prior written consent of the Lender, which consent may be withheld in the sole discretion of Lender. All of the rights and/or duties of the Lender under the Loan Documents, or any of them, shall be freely assignable. Subject to the foregoing, the rights and obligations of the Borrower and Lender under the Loan Documents shall be binding upon and shall inure to the benefit of the Borrower and Lender and their respective personal representatives, successors, heirs, and permitted assigns.

12. INCOME TAX CONSEQUENCES: **Borrower hereby acknowledges that the Lender has made no representation or warranty to Borrower concerning the income tax consequences of the loan to Borrower and Borrower shall be solely responsible for ascertaining and bearing such tax consequences** .

13. GOVERNING LAW: This Agreement shall be governed in all respects by the laws of the State of California.

14. HEADINGS: The titles and headings of the various paragraphs hereof are intended for means of reference and are not intended to place any construction on the provisions hereof.

15. INVALIDITY: If any provision of this Agreement shall be invalid or unenforceable, the remaining provisions shall not be affected thereby and every provision hereof shall be valid and enforceable to the fullest extent permitted by law.

16. COUNTERPARTS: This Agreement may be executed in one (1) or more separate counterparts, each of which, when so executed, shall be deemed to be an original. Such counterparts, together, shall constitute one and the same instrument.

17. MISCELLANEOUS: Time is of the essence of this Agreement, the Loan Documents, and any other document executed by Borrower in connection therewith. If any action shall be commenced between the parties with respect to the Loan, the prevailing party shall be entitled to recover its reasonable attorneys' fees and expenses from the non-prevailing party or parties. Liability hereunder shall be joint and several among Borrower and all other persons and entities now or hereafter liable for all or any part of the Loan. **Notwithstanding any provision above to the contrary, the Lender may waive in writing or by notation initialed hereon any obligation of Borrower provided for herein.**

18. JURY TRIAL: EACH OF LENDER AND BORROWER TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW HEREBY IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY AS TO ANY ISSUE RELATING HERETO IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE NOTE OR THE STOCK PLEDGE AGREEMENT.

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the date first written above.

BORROWER:

/s/ Gajus V. Worthington
Gajus V. Worthington

Address: _____

Telephone: _____

Facsimile: _____

THE LENDER:

FLUIDIGM CORPORATION

By: /s/ Erik T. Engelson

Name: Erik T. Engelson

Title: Chief Financial Officer

Address: 7100 Shoreline Court
South San Francisco, California 94080

Telephone: (650) 266-6000

Facsimile: (650) 871-7152

EXHIBIT A

FORM OF SECURED PROMISSORY NOTE

SECURED PROMISSORY NOTE

January 20, 2004 $250,000.00

South San Francisco, California

1. FOR VALUE RECEIVED, the undersigned, Gajus V. Worthington ("Borrower"), promises to pay to the order of Fluidigm Corporation, a California corporation ("Lender"), at 7100 Shoreline Court, South San Francisco, California 94080 (or at such other place as Lender may from time to time designate by written notice to Borrower), in lawful money of the United States, the principal sum of Two Hundred Fifty Thousand Dollars ($250,000.00) (the "Principal"), together with interest from the date of this Secured Promissory Note ("Note") on the unpaid principal balance at a rate equal to 3.52% per annum.

This is a limited recourse Note. The sole recourse of the holder of this Note in the event of the failure to pay this Note as and when due shall be limited to the "Pledged Collateral" as such term is defined in the Stock Pledge Agreement of even date herewith (the "Stock Pledge Agreement").

2. PAYMENT: The Principal and interest due pursuant to this Note shall be paid as follows:

2.1 Upon the occurrence of a Maturity Event (as defined herein), Borrower shall pay to Lender all amounts due under this Note.

2.2 Subject to the provisions of Section 4 herein, the Principal amount of this Note and all accrued interest shall be due and payable on January 20, 2011 or earlier as follows:

(a) In the event that Borrower voluntarily terminates his employment with Lender without "good reason," the Principal and all accrued interest shall be due and payable within thirty (30) days of such termination date. In the event that Borrower voluntarily terminates his employment with "good reason," the Principal and all accrued interest shall be due and payable within thirty (30) days of such termination date; provided , however , that if Borrower executes a waiver of all claims against Lender in a form reasonably satisfactory to Lender, the Principal and accrued interest shall be due and payable on the date which is 12 months following the termination date. As used herein, "good reason" shall mean the occurrence of any of the following events without the Borrower's written consent:

(i) a substantial diminution in the nature, status or prestige of Borrower's responsibilities, title or reporting level or the addition of responsibilities of a nature, status or prestige inconsistent with the office of Chief Executive Officer and President of a company such as Lender;

(ii) the relocation of Lender's executive offices or principal business location to a point more than one hundred (100) miles from the South San Francisco, California area;

(iii) a material reduction by Lender of Borrower's annual salary or annual bonus as in effect on the date hereof or as the same may be increased from time to time (other than a general reduction applicable to all or substantially all officers of Lender); or

(iv) any action by Lender (including the elimination of benefit plans without providing substitutes thereof or the reduction of Borrower's benefits thereunder) that would substantially diminish the aggregate value of Borrower's fringe benefits as they exist at such time (other than an elimination in benefits that applies to all or substantially all officers of the Lender).

(b) In the event that Lender terminates Borrower's employment with Lender for "cause," the Principal and all accrued interest shall be due and payable within thirty (30) days of such termination date. In the event that Lender terminates Borrower's employment with Lender other than for "cause," the Principal and all accrued interest shall be due and payable within thirty (30) days of such termination date; provided , however , that if Borrower executes a waiver of all claims against Lender in a form reasonably satisfactory to Lender, the Principal and all accrued interest shall be due and payable on the date which is 12 months following the termination date. As used herein, "cause" shall mean the occurrence of any of the following events:

(i) Borrower's repeated failure to satisfactorily perform his employment duties after written notice by the Board of Directors of Lender (the "Board") of such deficiency and an opportunity to cure within a reasonable period;

(ii) Borrower has committed an act that is, in the opinion of the Board, intended to or does materially injure the business of Lender;

(iii) Borrower has refused or failed to follow lawful and reasonable directions of the Board, after written notice by the Board and a reasonable period thereafter to cure such performance;

(iv) Borrower has been convicted of a felony involving moral turpitude that is likely, in the opinion of the Board, to inflict or has inflicted material injury on the business of Lender;

(v) a determination by the Board that Borrower has engaged in conduct constituting sexual harassment of any current or former employee of Lender; or

(vi) a determination by the Board that Borrower is, or has been, engaging or in any manner participating in any activity which is directly competitive with, or intentionally injurious to, Lender.

(c) In the event the Board has determined, upon advice of counsel, that repayment is required to comply with "Applicable Law" (as defined herein), the Principal and all accrued interest shall be due and payable immediately upon such determination by the Board. As used herein, "Applicable Law" means any and all laws of whatever jurisdiction, within or without the United States, including, but not limited to, the Sarbanes-Oxley Act of 2002, and the rules of any stock exchange or quotation system on which Lender's securities are then listed or quoted or

proposed to be listed or quoted, applicable to the taking or refraining from taking of any action under this Note.

(d) Without limiting the provisions of subsection (c) above, in the event that Lender (or any successor or assign) files a registration statement under the Securities Act of 1933, as amended (a "Registration"), or otherwise becomes an "Issuer" as such term is defined in the Sarbanes-Oxley Act of 2002, the Principal and all accrued interest shall be due and payable on the earliest of (i) the date immediately prior to date of filing of the registration statement with the Securities and Exchange Commission relating to the Registration or (ii) the date immediately prior to the date Lender otherwise becomes an "Issuer" within the meaning of the Sarbanes-Oxley Act of 2002; provided , however , in the event of any amendment to, or binding, non-appealable judicial interpretation of, Applicable Law that would permit Lender to maintain the indebtedness evidenced by the Loan after a Registration or such time as Lender becomes an "Issuer", the Board may, in its sole and absolute discretion and with the advice of legal counsel, extend such due and payable date to a date not more than three years after the closing date of any initial public offering of the Lender's securities pursuant to a Registration.

(e) In the event of a "Fundamental Corporate Transaction", the Principal and all accrued interest shall be due and payable on the date which is 12 months following the effective date of the Fundamental Corporate Transaction. As used herein, a "Fundamental Corporate Transaction" shall mean:

(i) a merger or consolidation in which Lender is not the surviving corporation (other than a merger or consolidation with a wholly-owned subsidiary, a reincorporation of Lender in a different jurisdiction, or other transaction in which there is no substantial change in the stockholders of Lender or their relative stock holdings);

(ii) a merger in which Lender is the surviving corporation but after which the shareholders of Lender immediately prior to such merger (other than any shareholder that merges, or which owns or controls another corporation that merges, with Lender in such merger) cease to own their shares or other equity interest in Lender;

(iii) the sale of all or substantially all of the assets of Lender; or

(iv) the acquisition, sale, or transfer of more than 50% of the outstanding shares of Lender by tender offer or similar transaction.

2.3 Principal and interest shall be payable in lawful money of the United States. Interest shall be calculated on the basis of a 360-day year consisting of twelve (12) months, each of thirty (30) days, and shall compound annually. Each payment shall be applied first to accrued interest, then to any other amounts (other than Principal) payable hereunder as designated by Lender, and then to reduce Principal.

2.4 All payments made hereunder shall be made by Borrower free and clear of, and without deduction for, any and all present and future taxes, levies, charges, deductions and

withholdings. Borrower shall pay upon demand any stamp or other taxes, levies or charges of any jurisdiction with respect to the execution, delivery, performance and enforcement of this Note.

3. SECURITY: This Note is secured by a pledge of shares of Common Stock of the Lender and other collateral (collectively, the "Shares") as set forth in the Stock Pledge Agreement.

4. MATURITY EVENT: Upon the occurrence of a Maturity Event (as hereinafter defined), the entire unpaid Principal balance and all accrued interest shall become immediately due and payable without further demand or notice to Borrower. To the extent permitted by law, any of the following events shall be a "Maturity Event" under this Note and the Stock Pledge Agreement:

(a) Borrower shall fail to pay any amount of the Principal on this Note and all accrued interest when due and shall fail to cure such non-payment within ten (10) days following written notice of such delinquency.

(b) There shall occur a breach or default in the performance of any obligation of Borrower contained in this Note, the Stock Pledge Agreement, the Employee Loan Agreement executed concurrently herewith (collectively, the "Loan Documents"), or any other agreement now or hereafter entered into by Borrower, on the one hand, and the Lender, on the other hand, relating to the loan evidenced by this Note.

(c) Borrower shall sell, convey, encumber, grant any lien upon, or otherwise alienate the Shares or the Property, or any part thereof, or any interest therein, or shall be divested of his title or any interest therein in any manner or way, whether voluntarily or involuntarily, without the written consent of the Lender being first had and obtained.

(d) Borrower (i) admits in writing his inability to pay debts, (ii) makes an assignment for the benefit of creditors, (iii) files a voluntary petition in bankruptcy, effects a plan or other arrangement with creditors, liquidates his assets under arrangement with creditors, or liquidates his assets under court supervision, (iv) has an involuntary petition in bankruptcy filed against him that is not discharged within sixty (60) days after such petition is filed, or (v) applies for or permits the appointment of a receiver or trustee or custodian for any of Borrower's property or assets which shall not have been discharged within sixty (60) days after the date of appointment.

(e) The Principal and accrued interest shall have become due and payable, upon the happening of certain events, on such dates as are set forth in Section 2.2 herein.

(f) Any representation or warranty of Borrower contained herein or in any certificate or agreement entered into between Borrower for the benefit of Lender in connection herewith shall prove to be false or misleading in any material respect.

(g) Any lien or other encumbrance is imposed against the Shares; provided, however, that in the event that a lien or encumbrance is imposed against the Shares without the consent of Borrower, a Maturity Event shall not occur until the lien or other monetary encumbrance is imposed against the Shares for a period of at least thirty (30) days.

(h) One (1) year following the death of the Borrower.

(i) The occurrence of any event which causes the Loan and transactions contemplated under the Loan Documents to be prohibited under Applicable Law, including any prohibition of the Sarbanes-Oxley Act of 2002 or other prohibition relating to loans to officers of public companies under federal or state law.

5. LATE CHARGE: There shall be no late charge apart from the acceleration of Principal and the accrual of interest.

6. BORROWER'S REPRESENTATIONS: Borrower hereby makes the following representations and warranties to the Lender and acknowledges that Lender is relying on such representations in making the Loan:

6.1 Borrower has and shall have good and marketable title to the Shares free and clear of any security interests, liens or encumbrances other than (i) joint ownership of the Shares with Borrower's spouse; (ii) a right of first refusal and repurchase rights in favor of the Lender entered into in connection with the purchase of the Shares; and (iii) the Stock Pledge Agreement in favor of Lender securing this Note. The Shares are and shall be fully vested.

6.2 Other than the consent of Borrower's spouse, the consent of no other person or entity is required to grant to Lender the security interest in the Shares evidenced by the Stock Pledge Agreement.

6.3 There are no actions, proceedings, claims, or disputes pending or, to the Borrower's knowledge, threatened against or affecting Borrower or the Shares.

7. BORROWERS' ADDITIONAL OBLIGATIONS: Borrower shall take any and all further actions that may from time to time be required to ensure that the Stock Pledge Agreement creates a valid first priority security interest on the Shares in favor of the Lender as security for the Note. Borrower shall not further encumber the Shares or permit any lien or other security interest to encumber the Shares. Upon request by Lender, but not more frequently than once during any calendar year, Borrower shall furnish evidence reasonably satisfactory to the Lender that: (i) Borrower has good and marketable title to the Shares; (ii) the consent of no other person or entity is required to grant a first priority security interest in the Shares to the Lender; (iii) the Stock Pledge Agreement is a first priority security interest in the Shares, and (iv) there are no other security interests, liens or encumbrances against the Shares. If it should be hereafter determined that there are defects against title or matters which could result in defects against title to the Shares, or that the consent of another person or entity is required to grant to and perfect in the Lender a valid first priority security interest on the Shares, Borrower shall promptly take all action necessary to remove such defects and to obtain such consent and grant (or cause to be granted) and perfect such security interest on the Shares. Failure of the Stock Pledge Agreement to be a valid first priority security interest on the Shares shall be deemed a Maturity Event as aforesaid.

8. ATTORNEYS' FEES: In the event of Borrower's default hereunder, Borrower shall pay all costs of collection, including reasonable attorneys' fees incurred by the holder hereof on account of such collection, whether or not suit is filed hereon.

9. WAIVER: The waiver by Lender of any breach of or default under any term, covenant or condition contained herein or in any other agreement referred to above shall be in writing and shall not be deemed to be a waiver of any subsequent breach of or default under the same or any other such term, covenant or condition.

10. NO USURY: Borrower hereby represents and warrants that at no time shall the proceeds of the indebtedness evidenced hereby be used "primarily for personal, family, or household purposes" as that term is defined and used in Article XV of the California Constitution (as amended from time to time). Anything in this Note to the contrary notwithstanding, it is expressly stipulated and agreed that the intent of Borrower and Lender are to comply at all times with all usury and other laws relating to this Note. If the laws of the State of California would now or hereafter render usurious, or are revised, repealed or judicially interpreted so as to render usurious, any amount called for under this Note, or contracted for, charged or received with respect to the loan evidenced by this Note, or if any prepayment by Borrower results in Borrower having paid any interest in excess of that permitted by law, then it is Borrower's and Lender's express intent that all excess amounts theretofore collected by Lender be credited to the principal balance of this Note (or, if this Note has been paid in full, refunded to Borrower), and the provisions of this Note immediately be deemed reformed and the amounts therefor collectible hereunder reduced, without the necessity of execution of any new document, so as to comply with the then applicable law, but so as to permit the recovery of the fullest amount otherwise called for hereunder.

11. PREPAYMENT: Borrower may prepay all or any portion of this Note at any time prior to the time it is due, with no premium or penalty.

12. GENERAL PROVISIONS: This Note shall be governed by and construed in accordance with the laws of the State of California. The makers of this Note hereby waive presentment for payment, protest and demand, notice of protest, demand and dishonor and nonpayment of this Note, and consent that Lender may extend the time for payment or otherwise modify the terms of payment or any part of the whole of the debt evidenced by this Note, at the request of any person liable hereon, and such consent shall not alter nor diminish the liability of any person. Borrower hereby waives the defense of the statute of limitations in any action on this Note to the extent permitted by law. Time is of the essence of this Note, the Loan Documents and any other document executed by Borrower in connection therewith. Liability hereunder shall be joint and several among Borrower and all other persons and entities now or hereafter liable for all or any part of the Loan.

13. ACKNOWLEDGEMENT BY BORROWER: THIS NOTE, THE LOAN AGREEMENT, THE STOCK PLEDGE AGREEMENT, AND ALL RELATED DOCUMENTATION ARE EXECUTED VOLUNTARILY AND WITHOUT ANY DURESS OR UNDUE INFLUENCE ON THE PART OF OR ON BEHALF OF THE BORROWER, WITH THE FULL INTENT OF CREATING THE OBLIGATIONS AND SECURITY INTERESTS DESCRIBED HEREIN AND THEREIN. BORROWER ACKNOWLEDGES THAT: (a) BORROWER HAS READ SUCH DOCUMENTATION; (b) BORROWER HAS BEEN REPRESENTED IN THE PREPARATION, NEGOTIATION AND EXECUTION OF SUCH DOCUMENTATION BY LEGAL COUNSEL OF BORROWER'S OWN CHOICE (OR HAS KNOWINGLY AND VOLUNTARILY CHOSEN NOT TO SEEK SUCH REPRESENTATION);

(c) BORROWER UNDERSTANDS THE TERMS AND CONSEQUENCES OF THIS NOTE, THE EMPLOYEE LOAN AGREEMENT, THE STOCK PLEDGE AGREEMENT, AND ALL RELATED AGREEMENTS AND DOCUMENTATION AND THE OBLIGATIONS THEY CREATE; AND
(d) BORROWER IS FULLY AWARE OF THE LEGAL AND BINDING EFFECT OF THIS NOTE, THE EMPLOYEE LOAN AGREEMENT, THE STOCK PLEDGE AGREEMENT AND THE OTHER DOCUMENTS CONTEMPLATED BY OR ENTERED INTO IN CONNECTION WITH THIS NOTE.

IN WITNESS WHEREOF, Borrower has executed this Note as of the day and year first above written.

/s/ Gajus V. Worthington
Gajus V. Worthington

[Signature Page to Secured Promissory Note]

EXHIBIT B

FORM OF STOCK PLEDGE AGREEMENT

STOCK PLEDGE AGREEMENT

This **STOCK PLEDGE AGREEMENT**, dated as of January 20, 2004 (this "Pledge Agreement"), is executed by Gajus V. Worthington, ("Debtor"), in favor of Fluidigm Corporation, a California corporation ("Secured Party").

RECITALS

A. Debtor and Secured Party are parties to an Employee Loan Agreement (the "Loan Agreement"), and Debtor has executed a Secured Promissory Note dated as of the date hereof (the "Note"), in favor of the Secured Party in the principal amount of $250,000.00.

B. In order to induce the Secured Party to extend the credit evidenced by the Note, Debtor has agreed to enter into this Pledge Agreement and to pledge and grant to Secured Party the security interest in the Pledged Collateral described below.

PLEDGE AGREEMENT

NOW, THEREFORE, in consideration of the above recitals and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Debtor hereby agrees with Secured Party as follows:

1. Definitions and Interpretation. Unless otherwise defined herein, all other capitalized terms used herein and defined in the Note shall have the respective meanings given to those terms in the Note, and all terms defined in the California Uniform Commercial Code (the "UCC") shall have the respective meanings given to those terms in the UCC.

2. The Pledge. To secure the Obligations as defined in Section 3 hereof, Debtor hereby pledges to Secured Party, and grants to Secured Party a security interest in, all of Debtor's right, title and interest, whether now existing or hereafter arising in all instruments, certificated and uncertificated securities, money and general intangibles of, relating to or arising from the following property (the "Pledged Collateral"):

(a) The shares of stock of the Company more particularly described on Schedule A attached hereto (the "Pledged Shares");

(b) All dividends (including cash dividends), other distributions (including stock redemption proceeds), or other property, securities or instruments in respect of or in exchange for the Pledged Shares, whether by way of dividends, stock dividends, recapitalizations, mergers, consolidations, split-ups, combinations or exchanges of shares or otherwise; and

(c) All proceeds of the foregoing ("Proceeds").

3. Security for Obligations. The obligations secured by this Pledge Agreement (the "Obligations") shall mean and include all loans, advances, debts, liabilities and obligations, howsoever arising, owed by Debtor to the Secured Party of every kind and description (whether or

not evidenced by any note or instrument and whether or not for the payment of money), now existing or hereafter arising under or pursuant to the terms of the Note, including, all interest, fees, charges, expenses, attorneys' fees and costs and accountants' fees and costs chargeable to and payable by Debtor hereunder and thereunder and under the Loan Agreement, in each case, whether direct or indirect, absolute or contingent, due or to become due, and whether or not arising after the commencement of a proceeding under Title 11 of the United States Code (11 U.S.C. Section 101 et seq.), as amended from time to time (including post-petition interest) and whether or not allowed or allowable as a claim in any such proceeding.

4. Delivery of Pledged Collateral. All certificates or instruments representing or evidencing the Pledged Collateral shall be delivered to Secured Party and shall be in suitable form for transfer by delivery, or shall be accompanied by duly executed instruments of transfer or assignment in blank, all in form and substance satisfactory to Secured Party.

5. Representations and Covenants. Debtor hereby represents and warrants as follows:

(a) Issuance of Pledged Shares, Etc. The Pledged Shares have been duly authorized and are validly issued and are fully paid and non-assessable, and the Pledged Shares are owned by Debtor free and clear of any and all liens, pledges, encumbrances or charges (other than the lien created in favor of Secured Party by this Pledge Agreement and a right of first refusal and certain repurchase rights granted to the Secured Party in connection with Debtor's purchase of the Shares), and Debtor has not optioned or otherwise agreed to sell, hypothecate, pledge, or otherwise encumber or dispose of the Pledged Shares. The Pledged Shares are fully vested.

(b) Security Interest. The pledge of the Pledged Collateral creates a valid security interest in the Pledged Collateral, which security interest is a perfected and first priority security interest, securing the payment of the Obligations and the obligations hereunder.

(c) Restatement of Representations and Warranties. On and as of the date any property becomes Pledged Collateral, the foregoing representations and warranties shall apply to such additional Pledged Collateral.

6. Further Assurances.

(a) Further Instruments and Documents; Action. Debtor agrees that at any time and from time to time, at Debtor's expense, Debtor will promptly execute and deliver all further instruments and documents, including without limitation all additional Pledged Collateral, and take all further action, that may be necessary or desirable, or that Secured Party may reasonably request, in order to perfect and protect any security interest granted or purported to be granted hereby or to enable Secured Party to exercise and enforce its rights and remedies hereunder with respect to any Pledged Collateral.

(b) Margin Regulations. In the event that Secured Party's Common Stock is now or later classified as "margin stock" as such term is defined under Regulation U of the Board of Governors of the Federal Reserve System ("Regulation U") and Secured Party is classified as a "lender" within the meaning of Regulation U, Debtor agrees to cooperate with Secured Party in

making any amendments to the Note (and related agreements) or providing any additional collateral as may be necessary to comply with such regulations.

(c) Liens on Pledged Collateral. Debtor agrees not to create, incur, assume or suffer to exist any lien or security interest of any kind upon the Pledged Collateral.

7. Voting Rights; Dividends; Etc.

(a) Rights Prior to an Event of Default. So long as no Event of Default shall have occurred and be continuing:

(i) Debtor shall be entitled to exercise any and all voting and other consensual rights pertaining to the Pledged Collateral (including the Pledged Shares) or any part thereof for any purpose not inconsistent with the terms of this Pledge Agreement.

(ii) Debtor shall be entitled to receive and retain free and clear of the security interest of Secured Party hereunder any and all dividends and interest paid in respect of the Pledged Shares, provided , however , that any and all (A) dividends and interest paid or payable other than in cash in respect of, and instruments and other property received, receivable or otherwise distributed in respect of, or in exchange for any Pledged Shares, (B) dividends and other distributions paid or payable in cash in respect of any Pledged Shares in connection with a partial or total liquidation or dissolution or in connection with a reduction of capital, capital surplus or paid-in-surplus, and (C) cash paid, payable or otherwise distributed in respect of principal of, or in redemption of, or in exchange for, any Pledged Shares, shall be, and shall be forthwith delivered to Secured Party to hold as, Pledged Collateral and shall, if received by Debtor, be received in trust for the benefit of Secured Party, be segregated from the other property or funds of Debtor and be forthwith delivered to Secured Party as Pledged Collateral in the same form as so received (with any necessary endorsement) to be held as part of the Pledged Collateral.

(b) Rights Following an Event of Default. Upon the occurrence and during the continuance of an Event of Default:

(i) All rights of Debtor to exercise the voting and other consensual rights which it would otherwise be entitled to exercise pursuant to Section 7(a)(i) and to receive the dividends and interest payments which it would otherwise be authorized to receive and retain pursuant to Section 7(a)(ii) shall cease and all such rights shall thereupon become vested in Secured Party which shall thereupon have the sole right, but not the obligation, to exercise such voting and other consensual rights and to receive and hold as Pledged Collateral such dividends and interest payments.

(ii) All dividends and interest payments which are received by Debtor contrary to the provisions of subparagraph (i) of this Section 7(b) shall be received in trust for the benefit of Secured Party, shall be segregated from other funds of Debtor and shall be forthwith delivered to Secured Party as Pledged Collateral in the same form as so received (with any necessary endorsement).

8. Events of Default.

(a) Event of Default. An "Event of Default" shall mean the occurrence of one or more of the following described events:

(i) Debtor shall default in the payment of principal or interest on the Note when the same is due, or default in the payment of any expense or other amount payable under the Loan Agreement, the Note or under this Pledge Agreement; or

(ii) Debtor shall breach the provisions of Section 6(c) of this Pledge Agreement; or

(iii) Debtor shall default in the performance of, or there shall be a breach of, any term, provision, representation, warranty, covenant, agreement or obligation (other than a covenant, agreement or obligation referred to in Section 8(a)(i) or Section 8(a)(ii) of this Pledge Agreement) contained in the Loan Agreement, Note or this Pledge Agreement and Debtor shall fail to cure such default within ten (10) days after written notice thereof from Secured Party.

(b) Rights Under the UCC. In addition to all other rights granted hereby, by the Note, by the Loan Agreement and by law, Secured Party shall have, with respect to the Pledged Collateral, the rights and obligations of a secured party under the UCC.

(c) Sale of Pledged Collateral. Debtor acknowledges and recognizes that Secured Party may be unable to effect a public sale of all or a part of the Pledged Collateral (including the Pledged Shares) and may be compelled to resort to one or more private sales to a restricted group of purchasers who will be obligated to agree, among other things, to acquire the Pledged Collateral for their own account, for investment and not with a view to the distribution or resale thereof. Debtor acknowledges that any such private sales may be at prices and on terms less favorable to Secured Party than those of public sales, and agrees that so long as such sales are made in good faith such private sales shall be deemed to have been made in a commercially reasonable manner and that Secured Party has no obligation to delay sale of any Pledged Collateral to permit the issuer thereof to register it for public sale under the Securities Act of 1933, as amended or under any state securities law.

(d) Notice, Etc. In any case where notice of sale is required, ten (10) days' notice shall be deemed reasonable notice. Secured Party may have resort to the Pledged Collateral or any portion thereof with no requirement on the part of Secured Party to proceed first against any other person, entity or property.

(e) Other Remedies. Upon the occurrence and during the continuance of an Event of Default, (i) at the request of Secured Party, Debtor shall assemble and make available to Secured Party all records relating to the Pledged Collateral at any place or places specified by Secured Party, together with such other information as Secured Party shall request concerning Debtor's ownership of the Pledged Collateral and relationship to the Company; and (ii) Secured Party or its nominee shall have the right, but shall not be obligated, to vote or give consent with respect to the Pledged Collateral (including the Pledged Shares) or any part thereof.

9. Secured Party Appointed Attorney-in-Fact.

Debtor hereby appoints Secured Party as Debtor's attorney-in-fact, with full authority in the place and stead of Debtor and in the name of Debtor or otherwise, from time to time in Secured Party's discretion and to the full extent permitted by law to take any action and to execute any instrument which Secured Party may deem reasonably necessary or advisable to accomplish the purposes of this Pledge Agreement in accordance with the terms and provisions hereof, including without limitation, to receive, endorse and collect all instruments made payable to Debtor representing any dividend, interest payment or other distribution in respect of the Pledged Collateral or any part thereof and to give full discharge for the same.

Debtor hereby ratifies all reasonable actions that said attorney shall lawfully do or cause to be done by virtue hereof. This power of attorney is a power coupled with an interest and shall be irrevocable. The powers conferred on Secured Party hereunder are solely to protect its interests in the Pledged Collateral and shall not impose any duty upon Secured Party to exercise any such powers. Secured Party shall be accountable only for amounts that it actually receives as a result of the exercise of such powers and in no event shall Secured Party or any of its officers, directors, employees or agents be responsible to Debtor for any act or failure to act, except for gross negligence or willful misconduct.

10. Release of Pledged Collateral.

Subject to any applicable law, rule or regulation to the contrary, upon written request of Debtor no more than once per calendar quarter, Secured Party shall deliver to Debtor a certificate or certificates representing so many full Pledged Shares (or other securities issued in respect thereof) the fair market value of which, as determined by the Board of Directors of the Company in its sole discretion, is greater than the principal amount and interest due under the Note as of the date of such delivery. Upon delivery of the certificate or certificates by Secured Party, such Pledged Shares (or other securities in respect thereof) shall no longer constitute Pledged Collateral.

11. Miscellaneous.

(a) Notices. All notices and other communications required or permitted hereunder shall be in writing and may be given by (a) personal delivery, (b) certified mail, postage prepaid, return-receipt requested, (c) courier service, fully prepaid for next business day delivery, or (d) facsimile. Any such notice shall be properly addressed to the address of the parties set forth on the signature page hereof and shall be deemed to have been given (i) if personally delivered, when delivered, (ii) if by certified mail, return-receipt requested, when delivered or refused, (iii) if by courier service, on the next business day following deposit, cost prepaid, with Federal Express or similar private carrier, or (iv) if by facsimile, instantaneously upon confirmation of receipt of facsimile. The Secured Party or Debtor may change their respective addresses by giving notice of the same in accordance with this paragraph. The term "business day" shall mean a day on which national banks are open for business in San Francisco, California.

(b) Nonwaiver. No failure or delay on Secured Party's part in exercising any right hereunder shall operate as a waiver thereof or of any other right nor shall any single or partial exercise of any such right preclude any other further exercise thereof or of any other right.

(c) Amendments and Waivers. This Pledge Agreement may not be amended or modified, nor may any of its terms be waived, except by written instruments signed by Debtor and Secured Party. Each waiver or consent under any provision hereof shall be effective only in the specific instances for the purpose for which given.

(d) Assignments. Debtor may not assign any of his rights and/or duties under this Agreement without the prior written consent of the Secured Party, which consent may be withheld in the sole discretion of Lender. All of the rights and/or duties of the Secured Party under this Agreement, shall be freely assignable. Subject to the foregoing, the rights and obligations of the Debtor and Secured Party under this Agreement shall be binding upon and shall inure to the benefit of the Debtor and Secured Party and their respective personal representatives, successors, heirs, and permitted assigns.

(e) Cumulative Rights, etc. The rights, powers and remedies of Secured Party under this Pledge Agreement shall be in addition to all rights, powers and remedies given to Secured Party by virtue of any applicable law, rule or regulation of any governmental authority, the Note or any other agreement, all of which rights, powers, and remedies shall be cumulative and may be exercised successively or concurrently without impairing Secured Party's rights hereunder. Debtor waives any right to require Secured Party to proceed against any person or entity or to exhaust any Pledged Collateral or to pursue any remedy in Secured Party's power.

(f) Partial Invalidity. If any time any provision of this Pledge Agreement is or becomes illegal, invalid or unenforceable in any respect under the law or any jurisdiction, neither the legality, validity or enforceability of the remaining provisions of this Pledge Agreement nor the legality, validity or enforceability of such provision under the law of any other jurisdiction shall in any way be affected or impaired thereby.

(g) Expenses. Each of Debtor and Secured Party shall bear its own costs in connection with the preparation, execution and delivery of, and the exercise of its duties under, this Pledge Agreement.

(h) Governing Law. This Pledge Agreement shall be governed by and construed in accordance with the laws of the State of California without reference to conflicts of law rules (except to the extent governed by the UCC).

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, Debtor has caused this Pledge Agreement to be executed as of the day and year first above written.

/s/ Gajus V. Worthington
Gajus V. Worthington

Address:

Telephone:

Facsimile:

ACKNOWLEDGED:

FLUIDIGM CORPORATION

By: /s/ Erik T. Engelson

Name: Erik T. Engelson

Title: CFO

Address: 7100 Shoreline Court
South San Francisco, California 94080

Telephone: (650) 266-6000

Facsimile: (650) 871-7152

SCHEDULE A

TO STOCK PLEDGE AGREEMENT

SHARES

Issuer	Certificate Number(s)	Certificate Date(s)	Registered Holder	Number of Shares
Fluidigm Corporation	226	01/15/04	Gajus V. Worthington	500,000 (Common Stock)
Fluidigm Corporation	224	01/15/04	Gajus V. Worthington	333,334 (Common Stock)

STOCK POWER AND ASSIGNMENT

SEPARATE FROM CERTIFICATE

FOR VALUE RECEIVED and pursuant to that certain Stock Pledge Agreement dated as of January 20, 2004 by and between Gajus V. Worthington and Fluidigm Corporation, a California corporation, the undersigned hereby sells, assigns and transfers unto __, __(___) shares of Common Stock of Fluidigm Corporation, a California corporation, standing in the undersigned's name on the books of said corporation represented by certificate number __ delivered herewith, and does hereby irrevocably constitute and appoint __ as attorney-in-fact, with full power of substitution, to transfer said stock on the books of said corporation.

Dated:

/s/ Gajus Worthington
(Signature)

Gajus Worthington
(Please Print Name)

/s/ Jami Worthington
(Spouse's Signature, if any)

Jami Worthington
(Please Print Name)

This Assignment Separate From Certificate was executed in conjunction with the terms of a Stock Pledge Agreement between the above assignor and Fluidigm Corporation, dated as of January 20, 2004.

Instruction: Please do not fill in any blanks other than the signature and name lines.

EXHIBIT C

SPOUSAL CONSENT

I acknowledge that I have read the foregoing Employee Loan Agreement by and between Gajus V. Worthington ("Borrower") and Fluidigm Corporation (the "Agreement"), the Secured Promissory Note (the "Note") and the Stock Pledge Agreement (the "Stock Pledge Agreement", and together with the Agreement and the Note, the "Loan Documents") and that I know their contents. I hereby consent to and approve all of the provisions of the Loan Documents, and agree that any interest I may have in or to the Pledged Collateral (as defined in the Stock Pledge Agreement) is subject to all the provisions of the Loan Documents. I will take no action at any time to hinder operation of the Loan Documents or any interest I may have in or to them.

/s/ Jami Worthington
Signature of Borrower's Spouse

Date: _____

Jami Worthington
Spouse's Name — Typed or Printed

Exhibit 10.16

FLUIDIGM CORPORATION

STOCK REPURCHASE AGREEMENT

This agreement is made this 10th day of April 2008, between Fluidigm Corporation, a Delaware corporation (the "Company") and Gajus V. Worthington (the "Founder").

Recitals

WHEREAS, the Company and the Founder are parties to that certain Employee Loan Agreement (the "Loan Agreement"), Secured Promissory Note (the "Note") and Stock Pledge Agreement (the "Pledge Agreement" and together, the "Loan Agreements"), each dated January 20, 2004, pursuant to which the Company loaned the Founder $250,000 at an interest rate of 3.52% per annum (the "Loan");

WHEREAS, the Loan is secured pursuant to the Pledge Agreement by 833,334 shares of the Company's common stock;

WHEREAS, the Founder desires to repay the Loan in connection with the initial public offering of the Company's common stock in accordance with Section 2.2(d) of the Note by selling 90,913 shares of Company common stock (the "Shares") held by the Founder to the Company at purchase price of $3.19 per share (the "Share Price");

WHEREAS, the Share Price was agreed to pursuant to an independent valuation report received by the Company and prepared by VRC, with a valuation date of April 9, 2008, in which it determined the fair market value of the Company's common stock to be $3.19 per share.

WHEREAS, the Company desires to accept repayment of the Loan by repurchasing the Shares at the Share Price from the Founder and canceling the Note pursuant to the terms and conditions contained in this Agreement and the Loan Agreements.

Agreement

NOW THEREFORE, in consideration of the mutual promises made herein, the parties agree as follows:

1. Stock Repurchase. Upon the Closing Date (as defined below), the Company hereby agrees to repurchase from the Founder, and the Founder hereby agrees to sell to the Company, the Shares, at the Share Price and for an aggregate repurchase price specified in Section 2 below.

From and after the payment of the repurchase price by the Company in the manner set forth in Section 2 below, the Founder's rights as a stockholder with respect to the Shares, including without limitation the right to vote or receive cash or stock dividends, shall cease. Upon payment in full of such repurchase price as specified in Section 2 below, the Shares shall be retired and eliminated from the shares which the Company shall be authorized to issue.

2. Closing. The closing of the sale and purchase of the Shares (the "Closing") shall be on April 10, 2008 or on such other date as the parties may agree (the "Closing Date"). At or before the Closing, the Founder shall deliver the stock certificate representing the Shares, duly endorsed on the reverse side for transfer to the Company, and the Company shall deliver payment to the Founder of the aggregate repurchase price of $290,014.38 by canceling and delivering the Note marked "canceled" in the principal amount of $250,000, plus $40,014.38 as of April 10, 2008 in accrued interest.

3. Release. In exchange for the repurchase of the Shares described above, the Company hereby releases you from all obligations under the Loan Agreements. The Company acknowledges that the Note has been repaid in full and has been canceled.

4. Founder's Representations.

4.1. The Shares are duly authorized, validly issued and are fully paid and non-assessable. Founder is the sole owner of the Shares, and has good and marketable title to the Shares free and clear of any security interests, liens or encumbrances other than (i) joint ownership of the Shares with Founder's spouse; (ii) a right of first refusal and repurchase rights in favor of the Company entered into in connection with the purchase of the Shares; and (iii) the Stock Pledge Agreement in favor of Company's securing the Note. The Shares are fully vested.

4.2. Founder represents and warrants that the Founder has had the opportunity to consult with his own tax, legal and investment advisors regarding the sale of the Shares to the Company. Founder represents that he is familiar with the Company's business and financial conditions by virtue of position with the Company and has the capacity to protect his own interests in connection with the repurchase of the Shares. Founder acknowledges that the Share Price is fair and equitable to him. In addition, Founder acknowledges that the Company may effect an initial public offering or other financing in the future, and such financing may be at a price substantially greater than the Share Price. Founder acknowledges that this Agreement does not confer upon Founder any right with respect to continuing as an employee or other service provider of the Company, nor will it interfere in any way with the Founder's right or the Company's right to terminate such relationship at any time, with or without cause, to the extent permitted by applicable laws. Founder acknowledges that the Company has no obligation (past, present or future) to issue to Founder any shares of the Company's capital stock. Founder agrees that this Agreement represents a negotiated transaction and that no offering was conducted by the Founder in connection herewith.

5. General Provisions.

A. This Agreement shall be governed, construed and enforced in accordance with the laws of the state of California, except with respect to its choice of law provisions. In the event that any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable, or void, this Agreement shall continue in full force and effect without such provision.

B. This Agreement represents the entire agreement between the parties with respect to the repurchase of the Shares by the Company from the Founder and supersedes any prior or concurrent representations or agreements with respect to such repurchase and the repayment of the Note. This Agreement may only be modified or amended by a writing signed by both parties.

C. The Company and Founder agree upon the request of either party to execute such further documents or instruments as may be necessary or desirable to carry out the purposes and intent of this Agreement.

D. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties have duly executed this Agreement as of the first date above.

“COMPANY”

FLUIDIGM CORPORATION

By: /s/ Vikram Jog
Vikram Jog
Chief Financial Officer

“FOUNDER”

By: /s/ Gajus V. Worthington
Gajus V. Worthington

Exhibit 10.17

January 29, 2008

Vikram Jog

Dear Vikram:

I am pleased to offer you a position with Fluidigm Corporation (the "Company") as Chief Financial Officer reporting to me commencing no later than Tuesday, February 19, 2008. You will receive a semi-monthly salary of $11,583.34 (equivalent to an annual salary of $278,000.00) less deductions required by law, which will be paid in accordance with the Company's normal payroll procedures.

In addition, you will receive a $20,000 signing bonus (subject to all applicable federal and state taxes and to full repayment if you terminate your employment with Fluidigm prior to your one-year anniversary) with your first payroll.

You will be eligible to participate in the Company's executive annual bonus program which is based on achievement of targets or performance criteria as may be specified by the Board. The terms and conditions of the executive annual program may be amended or varied from time to time at the sole discretion of the Board. The projected annual bonus for 2008 is estimated to be a maximum of 35% of the employee's annual base salary, subject to all applicable federal and state taxes, payable on February 13, 2009 and pro-rated on a monthly basis, if less than 12 months' service as of December 31st, 2008. The primary principle for payout of variable cash bonus is "pay for performance." Bonuses for executives will be 35% at 100%o of plan, payable as follows:

- 80% of bonus is for meeting corporate goals.
- 20% of bonus is for meeting departmental goals.
- The bonus will begin to be paid at meeting 80% of plan.

At the next Board meeting, or at the next committee meeting with requisite authorization, after you become an employee of the Company, the Company will grant you an option to purchase up to 500,000 shares of the Common Stock of the Company, at an exercise price equal to the fair market value of the shares at that time. 1/4th of said options will vest and become exercisable one year after the commencement of your employment with the Company and an additional 1/48th of said options will vest and become exercisable at the end of each month after said one year period. These options will be subject to Board approval and the terms of the Company's stock option plan.

Furthermore, at the same board meeting, or at the next committee meeting with requisite authorization, the Company will grant you additional options to purchase (i) 50,000 shares of the Common Stock of the Company, at an exercise price equal to the fair market value of the shares

at that time. These options will vest at the end of 2008 in conjunction with the company achieving its corporate goals (see Corporate Goals in the attached appendix A), and (ii) 50,000 shares of the Common Stock of the Company, at an exercise price equal to the fair market value of the shares at that time. These options will vest on the earlier of (a) achievement of departmental goals so long as the goals are achieved in 2008 (see Departmental Goals in the attached appendix A), or (b) December 31, 2011. Pay-out for partial achievement of goals will be at the discretion of the Compensation Committee. Goals can also be adjusted with approval by the CEO and the Compensation committee.

You are eligible to receive the Company's standard benefits package which includes medical, dental, vision, life and disability insurance benefits. Additional benefits, as the company may make generally available to its employees from time to time, will be made available to you. You will be entitled to 4 weeks paid vacation each year and such paid holidays as the Company gives to its employees generally.

You should be aware that your employment with the Company is for no specified period and constitutes at-will employment. As a result, you are free to resign at any time, for any reason or for no reason. Similarly, the Company is free to conclude its employment relationship with you at any time, with or without cause.

Your employment contract will also contain certain change of control and termination without cause provisions, summarized below:

- Termination "Without Cause" prior to a change of control results in: (i) 6 months severance paid as salary continuation, plus (ii) up to 6 months of reimbursement for COBRA expenses.
- Termination "Without Cause" after 12 months following a change of control results in: (i) 6 months severance paid as salary continuation, plus (ii) up to 3 months of reimbursement for COBRA expenses.
- Termination "Without Cause" or for "Good Reason" within 12 months following a change of control results in: (i) 6 months severance paid in lump sum, plus (ii) acceleration of all unvested options and restricted stock, and (iii) up to 6 months of reimbursement for COBRA expenses.
- If benefits are subject to 280G parachute payment excise taxes, then the executive will receive the "best of (i) the benefits delivered in full and subject to the excise tax, or (ii) reduced benefits such that no excise tax is applied.
- In the case of (i) death, (ii) disability, (iii) termination for cause, or (iv) termination that is voluntary and is not for Good Reason within 12 months of a change of control, then the executive gets no severance, and only salary and other employee benefits that are owing and due through date of termination of employment.

Notwithstanding the above, the final language and provisions of change of control clauses of your employment contract are subject to Board approval.

For purposes of federal immigration law, you will be required to provide to the Company documentary evidence of your identity and eligibility for employment in the United States. Such documentation must be provided to us within three (3) business days of your date of hire, or our employment relationship with you may be terminated.

You understand that as a condition of your employment you will be required to sign the Company's standard proprietary information agreement which the Company will be providing you with shortly.

To indicate your acceptance of the Company's offer, please sign and date this letter in the space provided below and return/fax it to me at (650) 871-7192. This offer expires on Tuesday, January 29, 2008 at midnight. A copy is provided for your records. This letter, along with the agreement relating to proprietary rights between you and the Company, set forth the terms of your employment with the Company and supersede any prior representations or agreements, whether written or oral. This letter may not be modified or amended except by a written agreement, signed by the Company and by you.

Vikram, we look forward to working with you at Fluidigm Corporation.

Sincerely,

/s/ Gajus Worthington
Gajus Worthington
President and Chief Executive Officer
Fluidigm Corporation

Encl.

ACCEPTED AND AGREED TO:

/s/ Vikram Jog	1/29/2008
Vikram Jog	Date

2008 Fluidigm Corporate goals:

1) Revenues of $ 18M (>100% year-on-year growth)
2) 50%+ margins throughout the year
3) Conduct IPO in 2008 —$300M+ pre-money valuation, raising >$60M
4) Meet expense budget/cash burn

Finance Specific for 2008:

1) Revenue recognition
   a) No material changes upon quarterly reviews and annual audit.
2) Accurate (no material restatements), timely (within 3 to 4 weeks of quarter end) closing of books and reporting (timeliness as required by investors and SEC).
3) SEC and SOX compliance, as needed.
4) Produce audited financial statements for 2005, 2006 and 2007 (and Q1 2008, if necessary) to enable the filing of Form S-1 registration statement in 1H08 (together with legal).

FLUIDIGM CORPORATION

EMPLOYMENT, CONFIDENTIAL INFORMATION AND INVENTION ASSIGNMENT AGREEMENT

As a condition of my employment with FLUIDIGM Corporation, its subsidiaries, affiliates, successors or assigns (together the "Company"), and in consideration of my employment with the Company and my receipt of the compensation now and hereafter paid to me by the Company, I agree to the following:

1. **At-Will Employment**. I understand and acknowledge that my employment with the Company is for an unspecified duration and constitutes "at-will" employment. I acknowledge that this employment relationship may be terminated at any time, with or without good cause or for any or no cause, at the option either of the Company or myself.

2. **Confidential Information**.

(a) **Company Information**. I agree at all times during the term of my employment and thereafter, to hold in strictest confidence, and not to use, except for the benefit of the Company, or to disclose to any person, firm or corporation without written authorization of the Board of Directors of the Company, any Confidential Information of the Company. I understand that "Confidential Information" means any Company proprietary information, technical data, trade secrets or know-how, including, but not limited to, research, product plans, products, services, customer lists and customers (including, but not limited to, customers of the Company on whom I called or with whom I became acquainted during the term of my employment), markets, software, developments, inventions, processes, formulas, technology, designs, drawings, engineering, hardware configuration information, marketing, finances or other business information disclosed to me by the Company either directly or indirectly in writing, orally or by drawings or observation of parts or equipment. I further understand that Confidential Information does not include any of the foregoing items which has become publicly known and made generally available through no wrongful act of mine or of others who were under confidentiality obligations as to the item or items involved.

(b) **Former Employer Information**. I agree that I will not, during my employment with the Company, improperly use or disclose any proprietary information or trade secrets of any former or concurrent employer or other person or entity and that I will not bring onto the premises of the Company any unpublished document or proprietary information belonging to any such employer, person or entity unless consented to in writing by such employer, person or entity.

(c) **Third Party Information**. I recognize that the Company has received and in the future will receive from third parties their confidential or proprietary information subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. I agree to hold all such confidential or proprietary information in the strictest confidence and not to disclose it to any person, firm or corporation or to use it except as necessary in carrying out my work for the Company consistent with the Company's agreement with such third party.

3. **Inventions**.

(a) **Inventions Retained and Licensed**. I have attached hereto, as Exhibit A, a list describing all inventions, original works of authorship, developments, improvements, and trade secrets which were made by me prior to my employment with the Company (collectively referred to as "Prior inventions"), which belong to me, which relate to the Company's proposed business, products or research and development, and which are not assigned to the Company hereunder; or, if no such list is attached, I represent that there are no such Prior Inventions. If in the course of my employment with the Company, I incorporate into a Company product, process or machine a Prior Invention owned by me or in which I have an interest, the Company is hereby granted and shall have a nonexclusive, royalty-free, irrevocable, perpetual, worldwide license to make, have made, modify, use and sell such Prior Invention as part of or in connection with such product, process or machine.

(b) **Assignment of Inventions**. I agree that I will promptly make full written disclosure to the Company, will hold in trust for the sole right and benefit of the Company, and hereby assign to the Company, or its designee, all my right, title, and interest in and to any and all inventions, original works of authorship, developments, concepts, improvements or trade secrets, whether or not patentable or registrable under copyright or similar laws, which I may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, during the period of time I am in the employ of the Company (collectively referred to as "Inventions"), except as provided in Section 3(f) below. I further acknowledge that all original works of authorship which are made by me (solely or jointly with others) within the scope of and during the period of my employment with the Company and which are protectible by copyright are "works made for hire," as that term is defined in the United States Copyright Act.

(c) **Inventions Assigned to the United States**. I agree to assign to the United States government all my right, title, and interest in and to any and all Inventions whenever such full title is required to be in the United States by a contract between the Company and the United States or any of its agencies.

(d) **Maintenance of Records**. I agree to keep and maintain adequate and current written records of all Inventions made by me (solely or jointly with others) during the term of my employment with the Company. The records will be in the form of notes, sketches, drawings, and any other format that may be specified by the Company. The records will be available to and remain the sole property of the Company at all times.

(e) **Patent and Copyright Registrations**. I agree to assist the Company, or its designee, at the Company's expense, in every proper way to secure the Company's rights in the Inventions and any copyrights, patents, mask work rights or other intellectual property rights relating thereto in any and all countries, including the disclosure to the Company of all pertinent information and data with respect thereto, the execution of all applications, specifications, oaths, assignments and all other instruments which the Company shall deem necessary in order to apply for and obtain such rights and in order to assign and convey to the Company, its successors, assigns, and nominees the sole and exclusive rights, title and interest in and to such Inventions, and any copyrights, patents, mask work rights or other intellectual property rights relating thereto. I further agree that my obligation to execute or cause to be executed, when it is in my power to do so, any such instrument or papers shall continue after the termination of this Agreement. If the Company is unable because of my mental or physical incapacity or for any other reason to secure my signature to apply for or to pursue any application for any United States or foreign patents or copyright registrations covering Inventions or original works of authorship assigned to the Company as above, then I hereby irrevocably designate and appoint the Company and its duly authorized officers and agents as my agent and attorney in fact, to act for and in my behalf and stead to execute and file any such applications and to do all other lawfully permitted acts to further the prosecution and issuance of letters patent or copyright registrations thereon with the same legal force and effect as if executed by me.

(f) **Exception to Assignments**. I understand that the provisions of this Agreement requiring assignment of Inventions to the Company do not apply to any invention which qualifies fully under the provisions of California Labor Code Section 2870 (attached hereto as Exhibit B). I will advise the Company promptly in writing of any inventions that I believe meet the criteria in California Labor Code Section 2870 and not otherwise disclosed on Exhibit A.

4. **Conflicting Employment**. I agree that, during the term of my employment with the Company, I will not engage in any other employment, occupation, consulting or other business activity directly related to the business in which the Company is now involved or becomes involved during the term of my employment, nor will I engage in any other activities that conflict with my obligations to the Company.

5. **Returning Company Documents**. I agree that, at the time of leaving the employ of the Company, I will deliver to the Company (and will not keep in my possession, recreate or deliver to anyone else) any and all devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings blueprints, sketches, materials, equipment, other documents or property, or reproductions of any aforementioned items developed by me pursuant to my employment with the Company or otherwise belonging to the Company, its successors or assigns. In the event of the termination of my employment, I agree to sign and deliver the 'Termination Certification" attached hereto as Exhibit C.

6. **Notification of New Employer**. In the event that I leave the employ of the Company, I hereby grant consent to notification by the Company to my new employer about my rights and obligations under this Agreement.

7. **Solicitation of Employees**. I agree that for a period of twelve (12) months immediately following the termination of my relationship with the Company for any reason, whether with or without cause, I shall not either directly or indirectly solicit, induce, recruit or encourage any of the Company's employees to leave their employment, or take away such employees, or attempt to solicit, induce, recruit, encourage or take away employees of the Company, either for myself or for any other person or entity.

8. **Conflict of Interest Guidelines**. I agree to diligently adhere to the Conflict of Interest Guidelines attached as Exhibit D hereto.

9. **Representations**. I agree to execute any proper oath or verify any proper document required to carry out the terms of this Agreement. I represent that my performance of all the terms of this Agreement will not breach any agreement to keep in confidence proprietary information acquired by me in confidence or in trust prior to my employment by the Company. I have not entered into, and I agree I will not enter into, any oral or written agreement in conflict herewith.

10. **Arbitration and Equitable Relief**.

(a) **Arbitration**. Except as provided in Section 10(b) below, I agree that any dispute or controversy arising out of or relating to any interpretation, construction, performance or breach of this Agreement, shall be settled by arbitration to be held in Santa Clara County, California, in accordance with the rules then in effect of the American Arbitration Association. The arbitrator may grant injunctions or other relief in such dispute or controversy. The decision of the arbitrator shall be final, conclusive and binding on the parties to the arbitration. Judgment may be entered on the arbitrator's decision in any court having jurisdiction. The Company and I shall each pay one-half of the costs and expenses of such arbitration, and each of us shall separately pay our counsel fees and expenses.

(b) **Equitable Remedies**. I agree that it would be impossible or inadequate to measure and calculate the Company's damages from any breach of the covenants set forth in Sections 2, 3, and 5 herein. Accordingly, I agree that if I breach any of such Sections, the Company will have available, in addition to any other right or remedy available, the right to obtain an injunction from a court of competent jurisdiction restraining such breach or threatened breach and to specific performance of any such provision of this Agreement. I further agree that no bond or other security shall be required in obtaining such equitable relief and I hereby consent to the issuance of such injunction and to the ordering of specific performance.

11. **General Provisions**.

(a) **Governing Law; Consent to Personal Jurisdiction**. This Agreement will be governed by the laws of the State of California, without reference to choice of laws or conflict of laws principles. I hereby expressly consent to the personal jurisdiction of the state and federal courts located in California for any lawsuit filed there against me by the Company arising from or relating to this Agreement.

(b) **Entire Agreement**. This Agreement sets forth the entire agreement and understanding between the Company and me relating to the subject matter herein and merges all prior discussions between us. No modification of or amendment to this Agreement, nor any waiver of any rights under this agreement, will be effective unless in writing signed by the party to be charged. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

(c) **Severability**. If one or more of the provisions in this Agreement are deemed void by law, then the remaining provisions will continue in full force and effect.

(d) **Successors and Assigns**. This Agreement will be binding upon my heirs, executors, administrators and other legal representatives and will be for the benefit of the Company, its successors, and its assigns.

Date: 02/25/2008

Signature /s/ Vikram Jog

Name of Employee (typed or printed) Vikram Jog

/s/ Denise Jimenez

Witness

EXHIBIT A

LIST OF PRIOR INVENTIONS
AND ORIGINAL WORKS OF AUTHORSHIP

Title	Date	Identifying Number or Brief Description

_____No inventions or improvements

_____Additional Sheets Attached

Signature of Employee:

Print Name of Employee: _____

Date: _____ ,_____

EXHIBIT B

CALIFORNIA LABOR CODE SECTION 2870
EMPLOYMENT AGREEMENTS; ASSIGNMENT OF RIGHTS

"(a) Any provision in an employment agreement which provides that an employee shall assign, or offer to assign, any of his or her rights in an invention to his or her employer shall not apply to an invention that the employee developed entirely on his or her own time without using the employer's equipment, supplies, facilities, or trade secret information except for those inventions that either:

(1) Relate at the time of conception or reduction to practice of the invention to the employer's business, or actual or demonstrably anticipated research or development of the employer.

(2) Result from any work performed by the employee for the employer.

(b) To the extent a provision in an employment agreement purports to require an employee to assign an invention otherwise excluded from being required to be assigned under subdivision (a), the provision is against the public policy of this state and is unenforceable."

EXHIBIT C

FLUIDIGM CORPORATION

TERMINATION CERTIFICATION

This is to certify that I do not have in my possession, nor have I failed to return, any devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, equipment, other documents or property, or reproductions of any aforementioned items belonging to **FLUIDIGM Corporation,** its subsidiaries, affiliates, successors or assigns (together, the "Company").

I further certify that I have complied with all the terms of the Company's Employment Confidential Information and Invention Assignment Agreement signed by me, including the reporting of any inventions and original works of authorship (as defined therein), conceived or made by me (solely or jointly with others) covered by that agreement.

I further agree that, in compliance with the Employment, Confidential Information and Invention Assignment Agreement, I will preserve as confidential all trade secrets, confidential knowledge, data or other proprietary information relating to products, processes, know-how, designs, formulas, developmental or experimental work, computer programs, data bases, other original works of authorship, customer lists, business plans, financial information or other subject matter pertaining to any business of the Company or any of its employees, clients, consultants or licensees.

I further agree that for twelve (12) months from this date, I will not solicit, induce, recruit or encourage any of the Company's employees to leave their employment.

Date: _____,__

_____
(Employee's Signature)

_____
(Type/Print Employee's Name)

EXHIBIT D

FLUIDIGM CORPORATION

CONFLICT OF INTEREST GUIDELINES

It is the policy of **FLUIDIGM Corporation** to conduct its affairs in strict compliance with the letter and spirit of the law and to adhere to the highest principles of business ethics. Accordingly, all officers, employees and independent contractors must avoid activities which are in conflict, or give the appearance of being in conflict, with these principles and with the interests of the Company. The following are potentially compromising situations which must be avoided. Any exceptions must be reported to the President and written approval for continuation must be obtained.

1. Revealing confidential information to outsiders or misusing confidential information. Unauthorized divulging of information is a violation of this policy whether or not for personal gain and whether or not harm to the Company is intended. (The Employment, Confidential Information and Invention Assignment Agreement elaborates on this principle and is a binding agreement.)

2. Accepting or offering substantial gifts, excessive entertainment, favors or payments which may be deemed to constitute undue influence or otherwise be improper or embarrassing to the Company.

3. Participating in civic or professional organizations that might involve divulging confidential information of the Company.

4. Initiating or approving personnel actions affecting reward or punishment of employees or applicants where there is a family relationship or is or appears to be a personal or social involvement (other than as officers of the Company appointed by the Board of Directors).

5. Initiating or approving any form of personal or social harassment of employees.

6. Investing or holding outside directorship in suppliers, customers, or competing companies, including financial speculations, where such investment or directorship might influence in any manner a decision or course of action of the Company.

7. Borrowing from or lending to employees, customers or suppliers.

8. Acquiring real estate of interest to the Company.

9. Improperly using or disclosing to the Company any proprietary information or trade secrets of any former or concurrent employer or other person or entity with whom obligations of confidentiality exist.

10. Unlawfully discussing prices, costs, customers, sales or markets with competing companies or their employees.

11. Making any unlawful agreement with distributors with respect to prices.

12. Improperly using or authorizing the use of any inventions which are the subject of patent claims of any other person or entity.

13. Engaging in any conduct which is not in the best interest of the Company.

Each officer, employee and independent contractor must take every necessary action to ensure compliance with these guidelines and to bring problem areas to the attention of higher management for review. Violations of this conflict of interest policy may result in discharge without warning.

May 3, 2010

Fredric Walder

Dear Fred:

I am pleased to offer you a position with Fluidigm Corporation (the "Company") as Chief Business Officer, reporting to me. Other terms of employment include:

Start Date: On or before Monday, May 17, 2010

Compensation:

You will receive a salary of $12,083.33 per pay period. We are on a semi-monthly pay schedule. This equates to a base compensation of $290,000.00 on an annual basis, less deductions as required by law, which will be paid in accordance with the Company's normal payroll procedures. This is a regular position and we envision that the work requirements will be approximately twenty-four (24) hours a week which equates to being paid 60% of your salary until July 1, 2010 when you will begin to work forty (40) hours a week.

Executive Bonus Plan:

You will be eligible to participate in the Company's executive annual bonus program which is based on achievement of targets or performance criteria as may be specified by the Board. The terms and conditions of the executive annual program may be amended or varied from time to time at the sole discretion of the Board. The projected annual bonus for 2010 is estimated to be a maximum of 35% of the employee's annual base salary, subject to all applicable federal and state taxes, payable on Q1 of 2011 and pro-rated on a monthly basis, if less than 12 months' service as of December 31, 2010. The primary principle for payout of variable cash bonus is "pay for performance." Bonuses for executives will be 35% at 100% of plan, payable as follows:

- 80% of bonus is for meeting corporate goals.
- 20% of bonus is for meeting departmental goals.
- The bonus will begin to be paid at meeting 80% of plan.

Stock Options:

Subject to approval by our Board of Directors (or a committee authorized by the Board), the Company will grant you an option to purchase up to 200,000 shares of Common Stock of the grant of stock options. l/4th of said options will vest and become exercisable one year after the commencement of your employment with the Company and an additional l/48th of said options will vest and become exercisable at the end of each month after said one year period. These options will be subject to the terms of the Company's 2009 Equity Incentive Plan.

Relocation;

In order to accommodate your activities associated with your move to the Bay Area, the Company is providing you with a relocation benefit package, as detailed in the attached Company Relocation Guideline. You are eligible, as outlined in the attached, to receive the specific benefits up to $105,000.00. As specifically modified for you, the closing cost benefit with respect to a home purchase must be used within one (1) year from the date of your hire.

If you use this benefit but leave before you complete one (1) full year of employment, then for each month prior to one year, you will be obligated to repay that pro-rata amount. For example, if you use this benefit after six (6) months of employment and leave the Company after nine (9) months, you will be obligated to repay 25% (3 months early divided by 12). Please contact Human Resources regarding any specific questions you may have pertaining to this benefit.

Benefits:

You are eligible to receive the Company's standard benefits package which includes medical, dental, vision, life and disability insurance benefits. Benefits will be effective the first day of the month following your date of hire or upon a qualifying event. Additional benefits, as the Company may make generally available to its employees from time to time, will be made available to you. You will be entitled to three (3) weeks paid vacation each year and such paid holidays as the Company gives to its employees generally.

Confidentiality and Company Policies:

It is important to protect our confidential information and proprietary material. Therefore, as a condition of employment you will be required to sign the Company's standard At-Will Employment, Confidential Information, Invention Assignment, and Arbitration Agreement.

Change of Control:

Your employment contract contains certain change of control and termination without cause provisions, summarized below:

- Termination "Without Cause" prior to a change of control results in: (i) 6 months severance paid as salary continuation, plus (ii) up to 6 months of reimbursement for COBRA expenses.
- Termination "Without Cause" after 12 months following a change of control results in: (i) 6 months severance paid as salary continuation, plus (ii) up to 3 months of reimbursement for COBRA expenses.
- Termination "Without Cause" or for "Good Reason" within 12 months following a change of control results in; (i) 6 months severance paid in lump sum, plus (ii) acceleration of all unvested options and restricted stock, and (iii) up to 6 months of reimbursement for COBRA expenses.
- If benefits are subject to 280G parachute payment excise taxes, then the executive will receive the "best of" (i) the benefits delivered in full and subject to the excise tax, or (ii) reduced benefits such that no excise tax is applied.
- In the case of (i) death, (ii) disability, (iii) termination for cause, or (iv) termination that is voluntary and is not for Good Reason within 12 months of a change of control, then the executive gets no severance, and only salary and other employee benefits that are owing and due through date of termination of employment.

Notwithstanding the above, the final language and provisions of change of control clauses of your employment contract are subject to Board approval.

Reference checks: This offer is contingent upon successfully passing your reference checks.

Employment Authorization:

For purposes of federal immigration law, you will be required to provide to the Company documentary evidence of your identity and eligibility for employment in the United States. Such documentation must be provided to us within three (3) business days of your date of hire, or our employment relationship may be terminated.

Other:

You should be aware that your employment with the Company is for no specified period and constitutes "at will" employment. As a result, you are free to resign at any time, for any reason or for no reason. Similarly, the Company is free to conclude its employment relationship with you at any time, with or without cause. In addition, the Company may change your compensation, duties, assignments, responsibilities or location of your position at any time to adjust to the changing needs of our dynamic Company.

In the event of any dispute or claim relating to or arising out of our employment relationship, you and the Company agree that all such disputes shall be fully and finally resolved by binding arbitration conducted by the American Arbitration Association in San Mateo County California. *However*, we agree that this arbitration provision shall not apply to any disputes or claims relating to or arising out of the misuse or misappropriation of the Company's trade secrets or proprietary information.

This offer expires on Friday, May 14, 2010, unless you accept prior to this date. To indicate your acceptance of the Company's offer, please sign and date this letter in the space provided below and return it in the envelope provided to Romeo Malabanan, Talent Acquisition & HR Associate, 7000 Shoreline Court, Suite 100, South San Francisco, CA 94080. A copy is provided for your records.

This letter, along with the agreement relating to proprietary rights between you and the Company, set forth the terms of your employment with the Company and supersede any prior representations or agreements, whether written or oral. This letter may not be modified or amended except by a written agreement, signed by the Company and by you.

Fred, we look forward to you joining our Company.

Sincerely,

/s/ Gajus V. Worthington
Gajus V. Worthington
President and CEO
Fluidigm Corporation

ACCEPTED AND AGREED TO:

/s/ Fredric Walder	14 May 2010
Fredric Walder	Date

Enclosures:

Personal information Worksheet	Benefits Election Form
I-9 Form	Benefits Summary
W-4 Form	Relocation Guideline
Direct Deposit	Promissory Note
In-Q Tel Security Questionnaire	
Confidentiality Agreement	

Exhibit 10.20

Please quote our reference when replying
Our Ref: JTC(L) 8339/859 Vol 1

25 July 2005

FLUIDIGM SINGAPORE PTE. LTD.
39 ROBINSON ROAD
#07-01 ROBINSON POINT
SINGAPORE(068911)

By Local Urgent Mail
(Attention: MR PAUL WYATT)

JTC Corporation
The JTC Summit
8 Jurong Town Hall Road
Singapore 609434

customer service hotline 1 800 568 7000

main line (65) 6560 0056

facsimile (65) 6565 5301

website www.jtc.gov.sg

Dear Sirs,

OFFER OF TENANCY FOR FLATTED FACTORY SPACE

1 We are pleased to offer a tenancy of the Premises subject to the covenants, terms and conditions in the annexed Memorandum of Tenancy No. **27.09** (" the MT ") and in this letter (collectively called " the Offer ").

2 2.1 The Premises :

Private Lot **A2045700** also known as Unit **#07-3532/3534/3536/3538** ("the Premises") in **BLK 1026 TAI SENG AVENUE** (" the Building ") in the **TAI SENG INDUSTRIAL ESTATE SINGAPORE 534413** as delineated and edged in red on the plan attached to the Offer.

2.2 Term of Tenancy :

3 years ("the Term") with effect from **1 October 2005** ("the Commencement Date").

2.3 Tenancy:

(a) Your due acceptance of the Offer in accordance with Clause 3 of this letter shall, together with the Offer, constitute a binding tenancy agreement (" the Tenancy ").

(b) In the event of any inconsistency or conflict between any covenant, term or condition of this letter and the MT, the relevant covenant, term or condition in this letter shall prevail.

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2.4 Area :

Approximately **1385 square metres** ("the Area").

2.5 Rent :

(a) Discounted rate of **$9.22** per square metre per month on the Area, for so long as you shall occupy by way of tenancy an aggregate floor area of 1,000 to 4,999 square metres in the Building or in the various flatted factories belonging to us; and

(b) Normal rate of **$9.50** per square metre per month on the Area, in the event that the said aggregate floor area occupied is at any time reduced to below *1,000* square metres (when the discount shall be totally withdrawn) with effect from the date of reduction in the said aggregate floor area,

("Rent") to be paid without demand and in advance without deduction on the 1st day of each month of the year (i.e. 1st of January, February, March, etc.). After your first payment is made in accordance with Clause 3 of this letter and the attached Payment Table, the next payment shall be made on **01 March 2005** .

2.6 Service Charge :

$2.25 per square metre per month ("Service Charge") on the Area as charges for services rendered by us, payable by way of additional and further rent without demand on the same date and in the same manner as the Rent, subject to our revision from time to time and in any case such revision to be to a rate no higher than that charged to other tenants in the Building.

2.7 Security Deposit/Banker's Guarantee :

Ordinarily we would require a tenant to lodge with us a security deposit equivalent to **three (3) months'** rent and service charge. However, as an off-budget measure and as payment by GIRO has been made a condition with which you must comply under clause 3 of this letter, you shall, at the time of your acceptance of the Offer, place with us a deposit equivalent to **one (1) month's** Rent (at the discounted rate) and Service Charge (" Security Deposit ") as security against any breach of the covenants, terms and conditions in the Tenancy, as follows :

(a) The Security Deposit may be in the form of cash or acceptable Banker's Guarantee in the form attached (effective from **1 August 2005** to **31 December 2008**), or such other form of security as we may in our reasonable discretion permit or accept.

(b) The Security Deposit shall be maintained at the same sum throughout the Term and shall be repayable to you without interest, or returned to you for cancellation within 30 days, after the termination of the Term (by expiry or otherwise) or expiry of the Banker's Guarantee, as the case may be, subject to appropriate deductions or payment to us for damages or other sums due under the Tenancy.

(c) Subject to Clause 2.6, if the Service Charge is increased, or any deductions are made from the Security Deposit, you shall immediately pay the amount of such increase or make good the deductions so that the Security Deposit shall at all times be equal to **one (1) month's** Rent (at the normal or discounted rate, as the case may be) and Service Charge.

(d) If at any time during the Term, your GIRO payment is discontinued, then you shall place with us, within two (2) weeks of the date of discontinuance of your GIRO payment, the additional sum equivalent to **two (2) months'** Rent and Service Charge, so that the Security Deposit shall at all times be equal to three (3) months' Rent (at the normal or discounted rate, as the case may be) and Service Charge for the remaining period of the Term.

(e) If at any time during the Term the off-budget measure is withdrawn you shall, if required in writing by us, also pay to us the additional sum equivalent to **two (2) months'** Rent and Service Charge, so that the Security Deposit shall at all times be equal to **three (3) months'** Rent (at the normal or discounted rate, as the case may be) and Service Charge for the remaining period of the Term.

2.8 Mode of Payment :

(a) Your first payment to be made with your letter of acceptance in accordance with Clause 3 of this letter and the attached Payment Table shall be by non-cash mode (eg, Cashier's Order, cheque).

(b) Thereafter during the Term, you shall pay Rent, Service Charge and GST by Interbank GIRO or any other mode to be determined by us.

(c) We enclose the GIRO authorization form for your completion.

2.9 Authorised Use :

You shall use the Premises for the purpose of **manufacture of elastomeric microfluidic chips with carriers, including associated research and development activities** only and such other purposes as may be agreed in writing by the Landlord and Tenant (" the Authorised Use ").

2.10 Approvals :

The Tenancy is subject to approvals being obtained from the relevant governmental and statutory authorities.

2.11 Possession of Premises :

(a) Subject to your acceptance of the Offer, keys to the Premises shall be made available to you within the period of two (2) months prior to the Commencement Date.

(b) From the date you accept the keys to the Premises ("Possession Date") until the Commencement Date, you shall be deemed a licensee upon the same covenants, terms and conditions as in the Tenancy.

(c) If you proceed with the Tenancy after the Commencement Date, the licence fee payable from the Possession Date to the Commencement Date shall be waived (" Rent-Free Period "). Should you fail to so proceed, you shall:

(c1) remove everything installed by you;

(c2) reinstate the Premises to its original state and condition; and

(c3) pay us a sum equal to the prevailing market rent payable for the period from the Possession Date up to the date the installations are removed and reinstatement completed to our reasonable satisfaction,

without prejudice to any other rights and remedies we may have against you under the Tenancy or at law.

2.12 Loading Capacity :

(a) **Normal (Ground & Non-ground) Floor Premises :**

You shall comply and ensure compliance with the following restrictions :

(a1) maximum loading capacity of the goods lifts in the Building; and

(a2) maximum floor loading capacity of **10** kiloNewtons per square metre of the Premises on the **07** storey of the Building PROVIDED THAT any such permitted load shall be evenly distributed.

2.13 Take-over of Premises :

(a) **Vacant Possession :**

The Offer is subject to **EEMS Singapore Pte Ltd** returning vacant possession of the Premises by **31 July 2005.**

(b) **Take-over of Fixtures and Fittings :**

If, however, you are taking over the Premises in its existing state and condition, including all the fixtures and fittings installed by or belonging to **EEMS Singapore Pte Ltd** (" the Said Installations ") then :

(b1) You shall accept the Premises including the Said Installations in its condition existing at the Commencement Date or the acceptance of the keys to the Premises by you, whichever is the earlier (" the Control Date ").

(b2) You shall, within such period of time as the parties agreed upon, at your own cost and expense, ensure that :

(b2.1) the Said Installations have been approved in writing by us and that plans on the Said Installations have been submitted to and approved in writing by us;

(b2.2) the Said Installations comply fully with all our guidelines and requirements (through the Building Control Unit), and those of the relevant governmental and statutory authorities, prevailing at the Control Date;

(b2.3) such or all of the Said Installations not approved by us under (b2.1) or which have failed to comply with (b2.2) are demolished and removed, subject to clauses 2.11, 2.12 and 2.13 of the MT; and

2.14 Option for Renewal of Tenancy :

(a) You may within 3 months before the expiry of the Term make a written request to us for a further term of tenancy of 3 years ("the further term").

(b) We may grant you a further term of tenancy of the Premises subject to the following:

(b1) there shall be no breach of your obligations at the time you make your request for a further term, and at the expiry of the Term;

(b2) the duration of the further term shall be mutually agreed upon;

(b3) the rent payable shall be at a revised rate to be determined by us, having regard to the market rent of the Premises at the time of granting the further term. Our determination of the rent shall be final and conclusive: and

(b4) the tenancy for the further term shall be upon the same covenants, terms and conditions except for the duration, rent, security deposit (which shall be equivalent to three (3) month's rent and service charge instead of two (2) months), and excluding a covenant for renewal of tenancy.

3 Mode of Due Acceptance :

The Offer shall lapse if we do not receive the following by **31 July 2005** :

(a) Duly signed letter of acceptance (**in duplicate**) of the Offer, in the form set out in the **Letter of Acceptance** attached. (**Please date as required in your letter of acceptance**)

(b) Payment of the sum set out in the **Payment Table** attached.

(c) Duly completed GIRO authorization form.

4 Please note that payments made prior to your giving us the other items listed above may be cleared by and credited by us upon receipt. However, if those other items are not forthcoming from you within the time stipulated herein, the Offer shall lapse and there shall be no contract between you and us arising hereunder. Any payments received shall then be refunded to you without interest and you shall have no claim of whatsoever nature against us.

5 Rent-Free Period :

As the Commencement Date will not be deferred, we advise you to accept the Offer as soon as possible and to collect the keys to the Premises on the scheduled date in order to maximize the Rent-Free Period referred to in Clause 2.11(c) of this letter.

6 Variation to the Tenancy :

Any variation, modification, amendment, deletion, addition or otherwise of the Offer shall not be enforceable unless agreed by both parties and reduced in writing by us. No terms or representation or otherwise, whether expressed or implied, shall form part of the Offer other than what is contained herein.

7 Season Parking :

Season parking tickets for car parking lots within the Estate can be purchased at our **Contact Centre, The JTC Summit, Level 1, 8 Jurong Town Hall Road Singapore 609434 (Contact Centre Hotline: 1800-5687000)** or applied online via Krypton, JTC's Customer Portal, http://krypton.jtc.gov.sg . Please note that the number of season parking ticket(s) that can be purchased by you will depend on eligibility rules set out by us.

8 Electricity Connection:

Upon your acceptance of the Offer, you are advised to proceed expeditiously to engage a registered electrical consultant to submit two sets each of electrical single-line diagrams and electrical layout plans to and in accordance with the requirements of our **Facilities Management Section, Operations Support Department of our Customer Services Group,** for endorsement before an application is made to SP Services Ltd to open an account for electricity connection.

Please contact the Facilities Management Section at **Blk 25 Kallang Avenue #05-02 Kallang Basin Industrial Estate Singapore 339416** for their requirements.

9 To guide and assist you, we enclose a **Schedule of Statutory Controls** for Flatted Factory Occupants.

Yours faithfully

/s/ Chern Shiong NG

Chern Shiong NG
INDUSTRIAL DEVELOPMENT (HIGH-RISE) DEPARTMENT
INDUSTRIAL PARKS DEVELOPMENT GROUP JTC CORPORATION
DID : **68833414**
FAX : **68855900**
Email : **ngcs@jtc.gov.sg**

ENCS:

☑ Payment Table
☑ Specimen Acceptance Form
☑ Schedule of Statutory Controls (SC2)]
☑ GIRO Form(s)
☑ MT No. 27.09
☑ Specimen BG Plan

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PAYMENT TABLE

PREMISES : PRIVATE LOT AT UNIT #07-3532/3534/3536/3538 BLK 1026 TAI SENG AVENUE TAI SENG INDUSTRIAL ESTATE SINGAPORE 534413

	Amount		+5% GST
Rent at **$9.22 per square metre per month on **1385** square metres for the period **1 February 2006** to **28 February 2006**	$ 12769.70		$ 638.49
**4 months rental free granted from 1 October 2005 to 31 January 2006			
$2.25 per square metre per month on **1385** square metres for the period **1 October 2005** to **31 October 2005**	$ 3116.25		$ 155.81
Total Rent Payable (inclusive of Service Charge)		$ 15885.95	$ 794.30
Security Deposit equivalent to three (3) months' Rent and Service Charge (in cash or Banker's Guarantee provided in accordance with Clause 2.7 of this letter)	$ 47657.85		
Less:			
Equivalent of two (2) month's Rent and Service Charge (re Off-budget Measure and GIRO)	$ 31771.90	$ 15885.95	

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Stamp fee payable on Letter of Acceptance (which we will stamp on your behalf)		
Note: If the Letter is not returned to us within 14 days of the date of the Letter, you will have to pay penalty on the stamp duty which is imposed by Stamp Duty Office of IRAS.	$ 1392.00	
Sub-Total Payable	$33163.90	$794.30
Add: GST@5%	$ 794.30	
Total Payable inclusive of GST	$33958.20	

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MEMORANDUM

OF

TENANCY

NO. 27.09

MT(FF) 27.09 + LO(FF)30.003/09 July 2002
GO+AN+LPN+WCL+TGP/LBL(CTG)/zmy+sr+vfm+at+sl

Index of clauses in Memorandum of Tenancy

EASEMENTS, RIGHTS AND PRIVILEGES

A The full right and liberty for the Tenant and the persons authorised by him (in common with all other persons entitled to the like right), at all times, by day or night to go, pass and repass over and along the main entrance of the Building and the common passageways, landings and stairways and to use the lifts PROVIDED THAT the Tenant shall not cause or permit any obstruction to the common passageways, landings, stairways and other common parts of and accesses to the Building.

B The free and uninterrupted passage and running of water, electricity and gaseous products from and to the Premises through the sewers, drains, water-courses, channels, pipes, shafts, flues, cables and wires which now are or may at any time during the Term be in, under or passing through the Building.

C The right of support and protection for the benefit of the Premises as is now enjoyed from the other premises and all other parts of the Building.

EXCEPTIONS AND RESERVATIONS

BUT RESERVING unto the Landlord and all others to whom the Landlord has granted or may grant :

D The easements, rights and privileges over, along and through the Premises equivalent to those above.

E All other easements, ancillary rights and obligations as are or may be implied by the Land Titles Act.

F The free and uninterrupted passage and running of telecommunication facilities from, through and to the Premises.

G The right of support and protection for the benefit of the other premises and all other parts of the Building as is now enjoyed from the Premises.

H The right to develop, redevelop, erect, alter or in any way deal with or use or let the Building or any other part of the Estate in such manner as shall be approved by the Landlord, the superior lessor or the Authorities notwithstanding that the access of light or air or any easement granted or appertaining to or enjoyed with the Premises may be obstructed or interfered with or that the Tenant might otherwise be entitled to object PROVIDED THAT if the same is undertaken by the Landlord, the Landlord shall endeavour to ensure minimum disruption to the Tenant’s operations.

COVENANTS AND CONDITIONS

Definitions

1.1 The following expressions shall have the following meanings:

(a) "Authorities"	:	all relevant governmental and statutory authorities.
(b) "Building"	:	the building in which the Premises is situated and of which it forms a part, including but not limited to the common parts and other premises in the building.
(c) "Carpark"	:	all parking lots, driveways, roads, ramps and loading bays, whether within or outside any building, in the Estate.
(d) "Commencement Date"	:	as defined in the Tenancy.
(e) "Estate"	:	the estate in which the Building is situated and of which it forms a part, including but not limited to the Carpark, compounds, grounds, gardens, bin centres, structures, other buildings and drains, cables and pipes above or below ground in the estate.
(f) "Law"	:	all laws, statutes, legislation, by-laws, rules, orders or regulations now or hereafter in force.
(g) "Landlord"	:	the Jurong Town Corporation (also known as "JTC Corporation") incorporated under the Jurong Town Corporation Act, its successors-in-title, and assigns.
(h) "Premises"	:	as defined in the Tenancy.
(i) "Rent"	:	as defined in the Tenancy.
(j) "Service Charge"	:	as defined in the Tenancy.
(k) "Tenant"	:	the Tenant as defined in the Tenancy and includes his personal representatives, successors-in-title, and permitted assigns (if any).

(l) "Tenancy" : the tenancy offer made by the Landlord to the Tenant in respect of the Premises and duly accepted by the Tenant.

(m) "Tenant's Obligations" : covenants, conditions, terms, stipulations and obligations to be observed or performed by the Tenant.

(n) "Term" : as defined in the Tenancy.

Interpretation

1.2 Unless the context otherwise requires:

(a) words importing the singular include the plural and vice versa;

(b) words importing the masculine gender include the feminine gender and vice versa;

(c) the expression "person" includes a body corporate;

(d) reference to a specific Act of Singapore shall include any amendment, revision or replacement made to it from time to time;

(e) where the Tenant consists of two or more persons all Tenant's Obligations shall be deemed to be binding on such persons jointly and severally;

(f) all marginal notes are for ease of reference only and shall not be taken into account in the construction or interpretation of the clause or paragraph to which they refer.

Tenant's Covenants

2 The Tenant covenants with the Landlord as follows:

Rent & Service Charge

2.1 To pay without demand and without deduction the Rent, Service Charge and all other sums charged or imposed upon the Premises or the Tenant by the Landlord in accordance with the Tenancy PROVIDED THAT :

(a) the Landlord shall be at liberty from time to time to revise the amount of Service Charge upon giving a written notice to the Tenant PROVIDED THAT such revision shall not be to a rate higher than that charged to other tenants in the Building; and

(b) the revised Service Charge shall be payable from the date specified in the said notice.

Interest

2.2 To pay interest ("Interest") at the rate of 8.5% per annum on any outstanding amount due and payable under the Tenancy from the due dates until payment in full is accepted by the Landlord PROVIDED THAT :

(a) the Landlord may revise the Interest to a higher rate from time to time at its absolute discretion; and

(b) if the Landlord shall refuse to accept the tender of the outstanding amount because of any breach of the Tenant's Obligations, the Interest shall nevertheless remain due and payable.

Taxes

2.3 To pay the Landlord any increase in property tax, which may be imposed whether by way of an increase in the annual value or an increase in the rate per centum, in the proportion attributable to the Premises as determined by the Landlord in its absolute discretion.

Cost of Documents

2.4 To pay all costs, disbursements, fees and charges, legal or otherwise, including stamp and registration fees in connection with the preparation, stamping and issue of the Tenancy and any prior, accompanying or future documents or deeds, supplementary, collateral or in any way relating to the Tenancy.

Cost of Performance

2.5 To perform and observe all the Tenant's Obligations at his own cost and expense.

Cost of Enforcement

2.6 To pay all costs and fees, legal or otherwise, including costs as between solicitor and client in connection with the enforcement of the Tenant's Obligations.

GST

2.7 To pay, in addition to and together with all taxable sums, the Goods And Services Tax ("GST") at the prevailing rate to the Landlord as collecting agent for the Authorities.

Insurance

2.8 (a) Not to do or suffer to be done anything whereby any insurance for the time being effected on the Premises or the Building may be rendered void or voidable or be in any way affected.

(b) To pay to the Landlord on demand all sums paid by the Landlord by way of increased premium and all costs and expenses incurred by the Landlord in connection with insurance rendered necessary by a breach or non-observance of sub-clause (a) above without prejudice to any other rights and remedies available to the Landlord.

Uniform External Appearance

2.9 Not to alter in any way the external appearance of the Premises including but not limited to the colour and type of all external parts such as doors, windows, grilles and walls without the prior written consent of the Landlord, such consent not to be unreasonably withheld.

Signages

2.10 Not to affix, paint or otherwise exhibit any name plate, banner, advertisement, flag-staff or any other thing except only the name of the Tenant in such places and manner as approved in writing by the Landlord such approval not to be unreasonably withheld or delayed.

Modifications

2.11 Not to do, permit or suffer to be done any of the following without the Landlord's prior written consent such consent not to be unreasonably withheld or delayed:

Tenant's Installations

(a) installation of air-conditioning system, ventilation system, electrical system, telecommunication equipment, plant, machinery, fixtures, fitting or other installations ("Tenant's Installations") in the Premises; and

All installations Fixtures & Fittings

(b) alter, remove, add or in any way interfere or tamper with fixtures, fittings and installations including the Tenant's Installations in the Premises, including but not limited to any existing fire alarm and extinguishing system, ventilation system, air-conditioning system, walls or floor finishes (including any tilings), pipes, wirings, equipment, power and light points and outlets.

Power Surge & Vibration

2.12 (a) Not to install or use any electrical, mechanical or telecommunication equipment, plant, machinery, fixtures, fittings, appliance or installations ("the Equipment") that causes heavy power surge, high frequency voltage and current, noise, vibration or any electrical or mechanical interference or disturbance whatsoever ("the Interference") which:

(a1) may prevent or prevents in any way the service or use of any communication system of the Landlord, other lessees, tenants or occupiers; or

(a2) affects the operation of equipment, plant, machinery, fixtures, fittings, appliances or installations of the Landlord, other lessees, tenants or occupiers.

(b) To allow the Landlord or any authorised person to inspect at all reasonable times, the Equipment in the Premises to determine the source of the Interference.

(c) To take suitable measures to eliminate or reduce the Interference to the Landlord's reasonable satisfaction, if it is found by the Landlord or such authorised person that the Equipment is causing or contributing to the Interference.

Safety of Building

2.13 (a) Not to do, permit or suffer to be done anything which affects the structure or safety of the Building.

Certificate of Statutory Completion

(b) Not to do, permit or suffer to be done nor omit to do anything which may delay or prevent the issuance of the Certificate of Statutory Completion in respect of the Building.

Thermal Insulation

2.14 Subject to clauses 2.11, 2.12 and 2.13 and the Landlord's prior written consent such consent not to be unreasonably withheld or delayed, to provide thermal insulation to the floor, ceiling and the walls of the Premises if the Tenant's activities results or may result in :

(a) moisture condensation on the floors, ceilings or walls of adjoining premises or common parts of the Building; or

(b) the generation of excessive heat or heat which causes or may cause undue discomfort to the Landlord, its lessees or tenants or the occupiers of any adjoining or neighbouring premises.

Maintenance and Repair

2.15 Subject to clauses 2.11, 2.12 and 2.13, to maintain and in good and tenantable repair and condition, fair wear and tear and damage caused by an event which in the Landlord's reasonable opinion is beyond the Tenant's control, excepted :

(a) the ceilings, doors, windows, glass and all the interior of the Premises including but not limited to walls, soffit, false ceiling, floor and all fixtures and fittings;

(b) the pipes, sumps, grease interceptors and sanitary installations whether in the floor, ceiling, walls or any part of the Premises; and

(c) all party walls, floors and ceilings separating the Premises from other premises in the Building jointly with the adjoining lessees, tenants or occupiers.

Responsibility for Damage

2.16 If the cause of any damage to the Estate can be traced directly or indirectly back to the Tenant's activities :

(a) to reinstate the Estate to the reasonable satisfaction of the Landlord as required by the Landlord in its reasonable discretion and within such time as the Landlord may reasonable stipulate; and

(b) in any event, to pay for all proceedings, costs, expenses, claims, losses, damages, penalties and liabilities arising out of the above including but not limited to such costs and expenses as reasonably determined by the Landlord.

Landlord's Right of Inspection and Repair

2.17 Upon prior reasonable notice to the Tenant, to permit the Landlord, its employees, agents and all persons authorised by it or them, with or without any necessary materials and appliances, at reasonable times during the day or night, to enter upon the Premises to :

(a) view or examine the state and condition of the Premises or the Building including but not limited to all windows,

doors, pipes, ducts, drains, cables and wires;

(b) execute any repairs or works to or in connection with the Building or the Premises which it or they may think fit, including but not limited to installation or replacement of windows, doors, pipes, ducts, drains, cables and wires;

(c) verify, by photographs or other means, that the Tenant's Obligations are observed and performed;

(d) carry out Refurbishment Works referred to in clause 4.5; and

(e) take inventories of equipment, plant, machinery, fixtures, fittings, appliances, installations, goods, materials and articles to verify that the Tenant's Obligations are observed and performed,

Removal of Installations

AND if so reasonable required by the Landlord, to remove any equipment, plant, machinery, installation, fixtures, fittings, appliances, partitions, goods, materials and articles to facilitate the above. The Landlord shall endeavour to ensure minimum disruption to the Tenant's operations.

Emergency

PROVIDED THAT in respect of (c) and (e) above, the Landlord, before performing the works, shall enter into a non-disclosure agreement with the Tenant in the format attached as Annex A **PROVIDED FURTHER THAT** in a situation which in the Landlord's opinion is an emergency or exigency, the Landlord shall have the full right and liberty to enter the Premises immediately, with or without the Tenant's consent, to take such action as the Landlord in its reasonable discretion deems fit.

Cease Activities for Repairs

2.18 To cease activities to such extent and during such hours as the Landlord may specify by reasonable prior written notice to the Tenant for any maintenance or repair work to be executed by the Landlord **PROVIDED THAT** in a situation which in the Landlord's opinion is an emergency or exigency, the Landlord shall be entitled to request the Tenant to cease activities immediately and the Tenant shall comply fully with such request.

No Assignment, Subletting

2.19 (a) Not to demise, assign, charge, create a trust or agency, mortgage, let, sublet, grant a licence or part with or share the possession or occupation of the Premises in whole or in part **PROVIDED THAT** with the Landlord's prior written consent, such consent not to be unreasonably withheld, the Tenant may let, sublet, grant a licence or part with or share the possession or occupation of the Premises in part or assign or novate the Premises in whole.

Sole-proprietor/Partners

(b) Subject to sub-clause (a) above, if the Tenant is a sole-proprietor or comprises of partners carrying on business under a business name registered under the Business Registration Act, not to effect any change in the

constitution or membership of the sole-proprietorship or partnership without the Landlord's prior written consent.

Obstructions

2.20 Not to place, permit or suffer to be placed any object, article or thing in or obstruct the accesses, stairways, passageways, pipes, drains, and other common parts of the Estate.

Disposal of Waste

2.21 To make good and sufficient provision for and to ensure the safe and efficient disposal of all waste, including but not limited to pollutants and refuse, to the reasonable requirements and reasonable satisfaction of the Landlord.

Yield Up at Termination

2.22 (a) At the termination of the Term, by expiry or otherwise :

(a1) to yield up the Premises to the Landlord in good and tenantable repair and condition, fair wear and tear and damage caused by an event which in the Landlord's reasonable opinion is beyond the Tenant's control, excepted;

(a2) (a2.1) to remove all tenant's fixtures and fittings;

(a2.2) to reinstate the Premises; and

(a2.3) if so required by the Landlord, to redecorate by painting the interior of the Premises,

to the reasonable satisfaction of the Landlord,

and in accordance with the Tenant's Obligations.

Permit Viewing

(b) To permit intending tenants and others, authorised by the Landlord or its agents, at reasonable times and by prior appointment with the Tenant, to enter and view the Premises during the three calendar months immediately preceding the determination of the Term.

Compliance with Landlord's Rules & Regulations

2.23 To observe and comply with and ensure observance and compliance with all rules, notices, regulations and stipulations which may, from time to time, be made by the Landlord in respect of the Estate and which have been furnished to the Tenant.

Compliance with Laws

2.24 (a) To comply with the Law and all directions and requirements of the Authorities :

(a1) relating to the Estate (where applicable);

(a2) relating to the use, occupation or otherwise of the Premises; or

(a3) in respect of the observance or performance of the Tenant's Obligations,

whether to be complied with by the Landlord or the Tenant and notwithstanding any consent which the Landlord may grant under any clause in the Tenancy or otherwise.

(b) To inform the Landlord without undue delay in writing of any notice received in relation to sub-clause (a) above.

Head Lease

2.25 To perform and observe the express and implied covenants on the Landlord's part in the head lease made between the President of the Republic of Singapore and the Landlord so far as they are not varied herein.

Hazardous Placement of Objects

2.26 Not to place, permit or suffer to be placed any object, article or thing by any window or balcony or any part of the Premises in a manner which in the Landlord's reasonable opinion may cause or is likely to cause any damage or injury to any property or person.

Nuisance

2.27 Not to do, permit or suffer to be done upon the Premises anything which in the opinion of the Landlord may be or become :

(a) a nuisance, annoyance or cause damage or inconvenience to; or

(b) an interference with the business or quiet or comfort of

the Landlord, its tenants or lessees or the occupiers of any adjoining or neighbouring premises.

Application of Restrictive Covenants

2.28 To comply with all restrictive covenants as set out in the Tenancy or at Law relating to the Premises as if they are also restrictive covenants relating to the Building or the Estate, where the context so admits.

Indemnity

2.29 To be responsible :

(a) for all loss, injury or damage whatsoever to any person or to the Building or the Estate, and any moveable or immovable property, arising directly or indirectly out of or in connection with :

(a1) the occupation or use of the Premises; or

(a2) any act or omission (whether with or without the Landlord's consent), neglect or default of the Tenant, the Tenant's employees, agents, authorised persons or visitors; and

(b) in respect of any act, matter or thing done, omitted to be done, permitted or suffered to be done, in contravention of the Tenant's Obligations,

AND to fully indemnify and keep indemnified the Landlord against all proceedings, costs, expenses, claims, losses, damage, penalties and liabilities arising out of the above PROVIDED THAT the Tenant's **liability to the Landlord, if** any, is limited to direct damages suffered by the Landlord and shall not include indirect, economic or consequential loss or damages.

Landlord's Covenants

3 The Landlord covenants with the Tenant as follows :

Quiet Enjoyment

3.1 Subject to the Tenant performing and observing all the Tenant's Obligations, the Tenant may peaceably and quietly hold and enjoy the Premises without any unlawful interruption or disturbance from or by the Landlord.

General Services

3.2 (a) To keep the exterior and roof of the Building and the lifts, entrances, passageways, staircases, common toilets and other conveniences intended for the use of the Tenant in repair and in sanitary and clean condition.

(b) To keep the stairs and passageways leading to the Premises and the lifts and toilets sufficiently lit.

Property Tax

3.3 To pay property tax payable in respect of the Premises PROVIDED THAT if the rate of such property tax shall be increased whether by way of an increase in the annual value or an increase in the rate percent, then the Tenant shall pay such increase as provided under Clause 2.3.

Insurance of Building

3.4 To keep the Building insured against loss or damage by fire and in the event of such loss or damage (unless resulting from some act or default of the Tenant, the Tenant's employees, agents, authorised persons or visitors) to rebuild and reinstate the damaged part of the Building PROVIDED THAT such insurance shall not include the contents in the Building nor loss due to the Premises being rendered out of commission.

4 The Landlord and Tenant agree to the following :

Forfeiture of Tenancy

4.1 The Landlord is entitled to forfeit the Tenancy by entering the Premises or any part thereof, if :

(a) the Rent, Service Charge, or any other sums due under or by virtue of the Tenancy, or any part thereof is unpaid for fourteen (14) days after becoming payable (whether the same is formally demanded or not);

(b) the Tenant is in breach of any of the Tenant's Obligations and the Landlord has given to the Tenant prior written notice specifying the breach and the Tenant has failed to rectify the breach within such period as set out in such notice;

(c) any writ of seizure and sale or its equivalent made in respect of the Premises is enforced by sale or by entry into possession;

(d) the Tenant enters into liquidation, whether compulsory or voluntary (save for the purpose of reconstruction or amalgamation);

(e) a bankruptcy petition is filed or a bankruptcy order is made against the Tenant;

(f) the Tenant makes an assignment for the benefit of the Tenant's creditors;

(g) the Tenant enters into any arrangement with its creditors by composition or otherwise; or

(h) the Tenant suffers any distress, attachment or execution on or against the Tenant's goods,

PROVIDED THAT the above is without prejudice to the Landlord's other rights and remedies in respect of any breach of the Tenant's Obligations.

Service of Notices

4.2 Any written notice shall be sufficiently served if effected :

(a) on the Landlord by registered post to its business address;

(b) on the Tenant by registered or ordinary post to or by leaving or affixing it at the business address or the Premises NOTWITHSTANDING THAT it is returned by the post office undelivered;

(c) by facsimile to the party to be served and the service shall be deemed to be made on the day of transmission if transmitted before 4 p.m. on a working day or 12 noon on a Saturday, but otherwise on the following working day; or

(d) on the Solicitor for the party in the manner provided in this clause.

Service of Process

4.3 Any process, by writ, summons or otherwise, shall be sufficiently served if effected on :

(a) the Landlord by registered post to its business address;

(b) the Tenant by registered post to or by leaving or affixing it at the business address or the Premises NOTWITHSTANDING THAT it is returned by the post office undelivered; or

(c) the Solicitor for the party in the manner provided in this clause.

Business Address

4.4 The business address for the purposes of clauses 4.2 and 4.3 shall be :

(a) the business address of the Solicitor (if any) who is acting for the party in the matter or proceedings in connection with which the service of the notice or process in question is to be effected;

(b) if the Tenant is a sole-proprietor or comprises of partners carrying or formerly carrying on business under a business name registered under the Business Registration Act, the principal or last known place of business; or

(c) in the case of a body corporate, the registered or principal office of the body.

Refurbishment Works

4.5 (a) The Tenant accepts the Premises with full knowledge that refurbishment and upgrading works are being or may be carried out in the Estate ("Refurbishment Works").

(b) The Tenant shall remove, relocate or modify, temporarily or permanently, every installation, fixture, fitting, device, equipment and article outside the Premises which are installed by the Tenant as the Landlord may specify for the purpose of :

(b1) permitting the Landlord, its employees, agents or authorised persons to properly carry out the Refurbishment Works; or

(b2) improving the appearance or aesthetics of the Building.

PROVIDED THAT the Landlord shall endeavour to ensure minimum disruption to the Tenant's operations.

Consents

4.6 Wherever it is provided in the Tenancy that the Tenant shall not do an act or thing without the Landlord's prior written consent, the Landlord may in its reasonable discretion :

(a) refuse to grant consent without giving any reason, and without refunding any administrative fee paid; or

(b) if it grants consent, in addition to the terms and conditions expressly provided (if any) in the relevant clause, impose reasonable terms and conditions including but not limited to any payment of monies, fees or deposit to the Landlord in accordance with prevailing rates or computation applicable to other tenants in the Building, and the restrictions in Section 17 of the Conveyancing and Law of Property Act shall not apply.

Landlord's Self-Help

4.7 (a) In the event of any breach of any of the Tenant's Obligations, the Landlord, in addition to its rights of forfeiture and any other rights and remedies, shall have reasonable discretion to :

(a1) repair, rectify or make good anything done or omitted to be done by the Tenant or perform any act which the Tenant is to perform under the Tenancy;

(a2) demolish, remove, relocate or modify and confiscate any equipment, plant, machinery, fixtures, fittings, appliances, installations, obstructions, partitions, goods materials, articles or structures including but not limited to grilles, doors, gates, or tilings erected, constructed or substituted by the Tenant in the Premises or at the stairways, passageways or other common parts of the Building;

(a3) reinstate the Landlord's fixtures or fittings with such materials as the Landlord may reasonably elect; or

(a4) carry out such other remedial measures as the Landlord reasonably thinks necessary.

Nothing in this clause shall be deemed to place on the Landlord an obligation to exercise the above rights.

(b) For the purpose of enabling the Landlord to exercise the above rights, the Tenant shall grant to the Landlord, its employees, agents and all persons authorised by it or them the right of entry with or without materials and appliances at reasonable times.

(c) The Tenant shall pay to the Landlord :

(c1) the reasonable costs of all such works and materials used by the Landlord together with such costs and expenses as reasonably determined by the Landlord; and

(c2) if the Tenant yields up the Premises at the termination of the Term, by expiry or otherwise without reinstating it to the standard required under the Tenancy, the sum equivalent to the Rent, Service Charge, tax or other sums which the Landlord would have been entitled to receive from the Tenant had the period within which such reinstatement works are effected by the Landlord been added to the Term,

and the same shall be recoverable from the Tenant as a debt.

Non-Waiver

4.8 The following shall not prejudice nor waive the Landlord's rights or remedies in respect of any breach of the Tenant's Obligations :

(a) any failure or omission of the Landlord to exercise any of its rights as Landlord under the Tenancy or Law;

(b) any receipt or acceptance of any Rent, Service Charge or other sums by the Landlord; or

(c) any waiver, expressed or implied by the Landlord of any other breach of the same or any other Tenant's Obligations,

PROVIDED THAT the Landlord shall be under no obligation to enforce or impose any covenants, conditions or terms against any lessees or tenants of any premises comprised in the Estate.

Landlord's Works

4.9 If required by Law or in the event of Refurbishment Works or any breach of any Tenant's Obligations, the Landlord undertakes any work affecting the Premises, the Landlord may reinstate the Premises :

(a) to the original state the Premises was in at the Commencement Date so far as possible fair wear and tear excepted; or

(b) If it deems fit, with such materials and finishing of similar quality.

The Tenant shall bear all the reasonable costs and expenses for the reinstatement work. If the Landlord deems in its reasonable discretion that such costs and expenses are to be borne by more than one person, the Landlord's apportionment shall be binding and conclusive and the Tenant agrees to pay his share as determined by the Landlord.

Exemption of Liability

4.10 The Landlord shall not be liable to the Tenant or his employees, agents, authorised persons or visitors, or his or their property in respect of any :

(a) interruption in the services provided by the Landlord by reason of any :

(a1) repair, maintenance, damage or Refurbishment Works; or

(a2) mechanical or other defect or breakdown including but not limited to breakdown in electricity, gas and water supply, pumps and lifts;

(b) act, omission, default, misconduct or negligence of the Landlord, its employees, agents and all persons authorised by it or them in connection with :

(b1) the performance or purported performance of any service which the Landlord provides;

(b2) the carrying out or purported carrying out of the Refurbishment Works;

(b3) the exercise or purported exercise of the Landlord's rights under clause 2.17 or 4.9 or self-help under clause 4.7; or

(b4) any accident, injury, loss or damage to the Tenant or his employees, agents, authorised persons or visitors, or his or their property;

(c) loss, damage, injury, liability, claim, penalty, proceedings, cost, expense, or inconvenience that may be suffered by the Tenant or his employees, agents, authorised persons or visitors, or his or their property resulting from or in connection with :

(c1) any breakage of or defect in any pipes, wires or other apparatus of the Landlord used in or about the Building;

(c2) any subsidence or cracking of the ground floor slabs, production floor slabs or apron slabs of the Premises or the Building; or

(c3) any defect, inherent or otherwise in the Premises or the Building.

unless, only in respect of 4.10 (a) and 4.10 (c) above, any loss or damage suffered by the Tenant is caused by the gross negligence or willful misconduct of the Landlord PROVIDED THAT the Landlord's liability, if any, is limited to direct damages suffered by the Tenant and shall not include indirect, economic or consequential loss or damages.

Distress Act

4.11 For the purpose of the Distress Act, the Service Charge shall be deemed to be rent recoverable in the manner provided in the said Act.

Severability

4.12 If at any time any provision or any part of a provision of the Tenancy is or becomes illegal, invalid or unenforceable in any respect, the remaining provisions or parts of the provision (to the extent that they are severable from such illegal, invalid or unenforceable provisions or part of the provision) shall in no way be affected or impaired thereby.

Third Party Rights

4.13 A person who is not a party to the Tenancy shall have no right under the Contracts (Rights of Third Parties) Act to enforce any of the covenants, terms or conditions of the Tenancy.

Governing Jurisdiction and Law

4.14 The Tenancy shall be interpreted in accordance with the laws of Singapore and any legal proceedings, actions or claims arising from or in connection with the Tenancy shall be commenced in and heard before the courts of Singapore and the Tenant agrees to submit itself to the jurisdiction of the courts of Singapore.

27 July 2005

INDUSTRIAL DEVELOPMENT (HIGH-RISE) DEPARTMENT
JTC Corporation
The JTC Summit
8 Jurong Town Hall Road
Singapore 609434

Attn : Chern Shiong NG

ACCEPTANCE OF OFFER OF TENANCY FOR THE PREMISES AT UNIT # 07-3532/3534/3536/3538 BLK 1026 TAI SENG AVENUE TAI SENG INDUSTRIAL ESTATE SINGAPORE 534413

1. We refer to your letter of offer and eStatement letter, both dated **25 July 2005** for the Tenancy and hereby confirm our acceptance of all the covenants, terms and conditions of the Offer and the eStatement letter.
2. We are currently opting to pay by GIRO, thus we enclose herewith a cheque for the amount of **$ 33958.20** as confirmation of our acceptance.
3. We have enclose herewith a duly completed GIRO authorization form.
4. We are fully aware that the Tenancy is subject to necessary approvals and clearances from the relevant governmental and statutory authorities (including but not limited to Pollution Control Department of the National Environment Agency and the Public Utilities Board). We shall be responsible to obtain and comply with such approvals and clearances.
5. We understand and agree that we will only be able to view our Statement of Accounts (SA) in Krypton and confirm that the following email addresses are the authorized recipients to receive the email notification to view our SA or eStatement in Krypton.

   Email address 1 : Grace.Yow@Fluidigm.com
   Email address 2 : Jim.Neesen@Fluidigm.com

6. We have enclosed a completed application for EASY access code.

Yow Mai Chan

Name of authorized signatory :

Designation: General Manager

For and on behalf of :

/s/ Yow Mai Chan

FLUIDIGM SINGAPORE PTE. LTD. :

In the presence of :

/s/ Phoa Cheng Han

Name of witness : PHOA CHENG HAN

NRIC No : 52577445 J

Please quote our reference when replying
Our Ref : JTC(L) 8339/859

1 August 2008

FLUIDIGM SINGAPORE PTE. LTD.
1026 TAI SENG AVENUE
#07-3532
SINGAPORE(534413)

By Local Urgent Mail

(Attention : GRACE YOW)

JTC Corporation
The JTC Summit
8 Jurong Town Hall Road
Singapore 609434

JTC hotline	1800 568 7000
main line	(65) 6560 0056
facsimile	(65) 6565 5301
website	WWW.jtc.gov.sg

Dear Sirs,

OFFER OF TENANCY FOR FLATTED FACTORY SPACE

1 We are pleased to offer a tenancy of the Premises subject to the covenants, terms and conditions in the annexed Memorandum of Tenancy No. **27.09** ("the MT") and in this letter (collectively called "the Offer").

2 **2.1** **The Premises** :

Private Lot **A2045701** also known as Unit **#02-3536** ("the Premises") in **BLK 1026 TAI SENG AVENUE** ("the Building") in the **TAI SENG INDUSTRIAL ESTATE SINGAPORE 534413** as delineated and edged in red on the plan attached to the Offer.

2.2 **Term of Tenancy** :

3 years ("the Term") with effect from **1 November 2008** ("the Commencement Date").

2.3 **Tenancy**:

(a) Your due acceptance of the Offer in accordance with Clause 3 of this letter shall, together with the Offer, constitute a binding tenancy agreement ("the Tenanc v").

(b) In the event of any inconsistency or conflict between any covenant, term or condition of this letter and the MT, the relevant covenant, term or condition in this letter shall prevail.

2.4 Area :

Approximately **193 square metres** ("the Area").

2.5 Rent:

Discounted Rent

(a) Discounted rate of **$8.00** per square metre per month on the Area, for so long as you shall occupy by way of tenancy an aggregate floor area of 1,000 to 4,999 square metres in the Building or in the various flatted factories belonging to us; and

(b) Normal rate of **$8.25** per square metre per month on the Area, in the event that the said aggregate floor area occupied is at any time reduced to below *1,000* square metres (when the discount shall be totally withdrawn) with effect from the date of reduction in the said aggregate floor area.

("Rent") to be paid without demand and in advance without deduction on the 1st day of each month of the year (i.e. 1st of January, February, March, etc.). After your first payment is made in accordance with Clause 3 of this letter and the attached Payment Table, the next payment shall be made on **01 December 2008** .

2.6 Service Charge :

$2.25 per square metre per month ("Service Charge") on the Area as charges for services rendered by us, payable by way of additional and further rent without demand on the same date and in the same manner as the Rent, subject to our revision from time to time.

2.7 Security Deposit/Banker's Guarantee :

Ordinarily we would require a tenant to lodge with us a security deposit equivalent to **three (3) months'** rent and service charge. However, as payment by GlRO has been made a condition with which you must comply under clause 3 of this letter, you shall, at the time of your acceptance of the Offer, place with us a deposit equivalent to **one (1) month's** Rent (at the discounted rate) and Service Charge ("Security Deposit") as security against any breach of the covenants, terms and conditions in the Tenancy, as follows :

(a) The Security Deposit may be in the form of cash or acceptable Banker's Guarantee in the form attached (effective from **1 September 2008** to **31 January 2012**), or such other form of security as we may in our absolute discretion permit or accept.

(b) The Security Deposit shall be maintained at the same sum throughout the Term and shall be repayable to you without interest, or returned to you for cancellation, after the termination of the Term (by expiry or otherwise) or expiry of the Banker's Guarantee, as the case may be, subject to appropriate deductions or payment to us for damages or other sums due under the Tenancy.

(c) If the Rent at the discounted rate is increased to the normal rate, or Service Charge is increased, or any deductions are made from the Security Deposit, you shall immediately pay the amount of such increase or make good the deductions so that the Security Deposit shall at all times be equal to **one (1) month's** Rent (at the normal or discounted rate, as the case may be) and Service Charge.

(d) If at any time during the Term, your GlRO payment is discontinued, then you shall place with us, within two (2) weeks of the date of discontinuance of your GIRO payment, the additional sum equivalent to **two (2) months'** Rent and Service Charge, so that the Security Deposit shall at all times be equal to three (3) months' Rent (at the normal or discounted rate, as the case may be) and Service Charge for the remaining period of the Term.

2.8 Mode of Payment:

(a) Your first payment to be made with your letter of acceptance in accordance with Clause 3 of this letter and the attached Payment Table shall be by non-cash mode (eg, Cashier's Order, cheque).

(b) Thereafter during the Term, you shall pay Rent, Service Charge and GST by Interbank GlRO or any other mode to be determined by us.

(c) You have an existing GlRO account with us, the limit of which has to be increased to cover all the aforesaid payments. Please write to your Banker to authorize the same ("the letter of authorization") and let us have a copy thereof in accordance with the Mode of Due Acceptance.

(d) However, pending finalisation for the GlRO arrangement, you shall pay Rent, Service Charge and GST as they fall due by cheque or Cashier's Order.

2.9 Authorised Use :

You shall use the Premises for the purpose of **manufacture and testing of elastomeric microfluidic and life science instruments, including associated research and development activities** only and for no other purpose whatsoever ("the Authorised Use").

2.10 Approvals :

The Tenancy is subject to approvals being obtained from the relevant governmental and statutory authorities.

2.11 Possession of Premises :

(a) Subject to your acceptance of the Offer, keys to the Premises shall be made available to you within the period of two (2) months before the Commencement Date.

(b) From the date you accept the keys to the Premises ("Possession Date") until the Commencement Date, you shall be deemed a licensee upon the same covenants, terms and conditions as in the Tenancy.

(c) If you proceed with the Tenancy after the Commencement Date, the licence fee payable from the Possession Date to the Commencement Date shall be waived ("Rent-Free Period"). Should you fail to so proceed, you shall :

(cl) remove everything installed by you;

(c2) reinstate the Premises to its original state and condition; and

(c3) pay us a sum equal to the prevailing market rent payable for the period from the Possession Date up to the date the installations are removed and reinstatement completed to our satisfaction,

without prejudice to any other rights and remedies we may have against you under the Tenancy or at law.

2.12 LoadingCapacity:

(a) Normal (Ground & Non-ground) Floor Premises:

You shall comply and ensure compliance with the following restrictions :

(al) maximum loading capacity of the goods lifts in the Building; and

(a2) maximum floor loading capacity of **12.5** kiloNewtons per square metre of the Premises on the 02 storey of the Building PROVIDED THAT any such permitted load shall be evenly distributed.

(b) You shall therefore, subject to our prior written consent, provide at your own cost suitable and proper foundation for all machinery, equipment and installation at the Premises.

2.13 Optionfor Renewal of Tenancy:

(a) You may within 3 months before the expiry of the Term make a written request to us for a further term 3 years.

(b) We may grant you a further term of 3 years of tenancy of the Premises subject to the following :

(bl) there shall be no breach of your obligations at the time you make your request for a further term, and at the expiry of the Term;

(b2) the rent payable shall be at a revised rate to be determined by us, having regard to the market rent of the Premises at the time of granting the further term. Our determination of the rent shall be final and conclusive; and

(b3) the tenancy for the further term shall be upon the same covenants, terms and conditions except for the rent, security deposit (which shall be equivalent to three (3) month's rent and service charge instead of two (2) months), and excluding a covenant for renewal of tenancy.

3 Mode of Due Acceptance:

The Offer shall lapse if we do not receive the following by **15 August 2008:**

(a) Duly signed letter of acceptance (**in duplicate**) of the Offer, in the form set out in the **Letter of Acceptance** attached. (**Please date as required in your letter of acceptance)**

(b) Payment of the sum set out in the **Payment Table** attached.

(c) A copy of the letter of authorization from you to your Banker.

4 Please note that payments made prior to your giving us the other items listed above may be cleared by and credited by us upon receipt. However, if those other items are not forthcoming from you within the time stipulated herein, the Offer shall lapse and there shall be no contract between you and us arising hereunder. Any payments received shall then be refunded to you without interest and you shall have no claim of whatsoever nature against us.

5 Rent-Free Period:

As the Commencement Date will not be deferred, we advise you to accept the Offer as soon as possible and to collect the keys to the Premises on the scheduled date in order to maximize the Rent-Free Period referred to in Clause 2.11(c) of this letter.

6 Variation to the Tenancy:

Any variation, modification, amendment, deletion, addition or otherwise of the Offer shall not be enforceable unless agreed by both parties and reduced in writing by us. No terms or representation or otherwise, whether expressed or implied, shall form part of the Offer other than what is contained herein.

7 Car-Parking Scheme :

The carpark for **BLK 1026 TAI SENG AVENUE** is currently managed by **P-PARKING INTERNATIONAL PTE LTD** and you will have to observe and be bound by all the rules and regulations governing the use and operation of the carpark. You are requested to contact :

736B GEYLANG ROAD
SINGAPORE 389647
Tel: 67494119
Fax: 67493689

on your use of the carpark.

8 Electricity Connection:

Upon your acceptance of the Offer, you are advised to proceed expeditiously to engage a registered electrical consultant to submit two sets each of electrical single-line diagrams and electrical layout plans to and in accordance with the requirements of our **Facilities Management Section, Operations Support Department of our Customer Services Group,** for endorsement before an application is made to SP Services Ltd to open an account for electricity connection.

Please contact the Facilities Management Section at **The JTC Summit, 8 Jurong Town Hall Road Singapore 609434** for their requirements.

9 To guide and assist you, we enclose a **Schedule of Statutory Controls for Flatted, Ramp-up and Stack-up Factory Customers.**

Yours faithfully

/s/ Daniell WONG

Daniell WONG
INDUSTRIAL CLUSTERS DEVELOPMENT DEPARTMENT
INDUSTRIAL PARKS DEVELOPMENT GROUP
JTC CORPORATION
DID : **68833405**
FAX : **68855901**
Email : **daniellw@jtc.gov.sg**

ENCS:

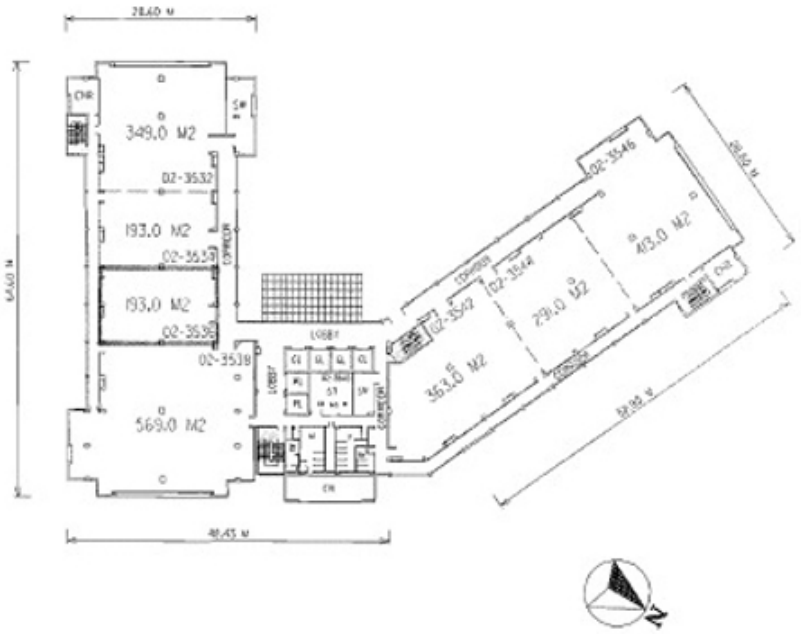
[x] Payment Table [x] GIRO Form(s) [x] Specimen BG Plan
[x] Specimen Acceptance Form [x] MT No. 27.09
[x] **Schedule of Statutory Controls for Flatted, Ramp-up and Stack-up Factory Customers**

PAYMENT TABLE

PREMISES : PRIVATE LOT A2045701 UNIT #02-3536 BLK 1026 TAI SENG AVENUE TAI SENG INDUSTRIAL ESTATE SINGAPORE 534413

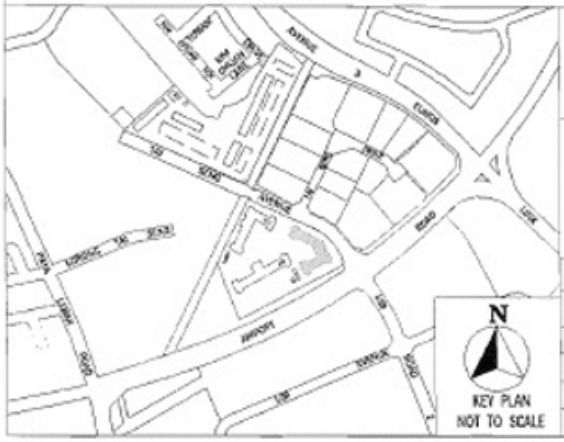
	Amount		+7% GST
Rent at **$8.00** per square metre per month on **193** square metres for the period **1 November 2008** to **30 November 2008**	$ 1544.00		$ 108.08
$2.25 per square metre per month on **193** square metres for the period **1 November 2008** to **30 November 2008**	$ 434.25		$ 30.40
Total Rent Payable (inclusive of Service Charge)		$ 1978.25	$ 138.48
Security Deposit equivalent to three (3) months' Rent and Service Charge (in cash or Banker's Guarantee provided in accordance with Clause 2.7 of this letter)	$ 5934.75		
Less:			
Equivalent of two (2) month's Rent and Service Charge (re GIRO)	$ 3956.50	$ 1978.25	

Stamp fee payable on Letter of Acceptance (which we will stamp on your behalf)		
Note: If the Letter is not returned to us within 14 days of the date of the Letter, you will have to pay penalty on the stamp duty which is imposed by Stamp Duty Office of IRAS.	$ 192.00	
Sub-Total Payable	$4148.50	$138.48
Add: GST @ 7%	$ 138.48	
Total Payable inclusive of GST	$4286.98	



2ND STOREY

CNR	CONDENSER ROOM
SW	SWITCH ROOM
ST	STOREROOM
PL	PASSENGER LIFT
GL	GOODS LIFT
CTR	COOLING TOWER ROOM
F	FEMALE TOILET
M	MALE TOILET
XF	EXECUTIVE FEMALE TOILET
XM	EXECUTIVE MALE TOILET



JTC CORPORATION

ALLOCATION PLAN

1026 TAI SENG AVENUE

ALLOCATION NO.	A2045701
UNIT NO.	#02-3536
DRAWING NO.	
SCALE	1 : 750
PREPARED BY	Jacy Ng
DATE	210496

12 August 2008

INDUSTRIAL DEVELOPMENT (HIGH-RISE) DEPARTMENT
JTC Corporation
The JTC Summit
8 Jurong Town Hall Road
Singapore 609434

Attn : Daniell Wong

ACCEPTANCE OF OFFER OF TENANCY FOR THE PREMISES AT UNIT # 02-3536 BLK 1026 TAI SENG AVENUE TAI SENG INDUSTRIAL ESTATE SINGAPORE 534413

1. We refer to your letter of offer and eStatement letter, both dated **1 August 2008** for the Tenancy and hereby confirm our acceptance of all the covenants, terms and conditions of the Offer and the eStatement letter.
2. We are currently on GIRO, thus we enclose herewith a cheque for the amount of **$ 4,286.98** as confirmation of our acceptance.
3. We are fully aware that the Tenancy is subject to necessary approvals and clearances from the relevant governmental and statutory authorities (including but not limited to Pollution Control Department of the National Environment Agency and the Public Utilities Board). We shall be responsible to obtain and comply with such approvals and clearances.

/s/ Yow Mai Chan, Grace

Yow Mai Chan, Grace
Managing Director

For and on behalf of :

Fluidigm Singapore Pte Ltd
(Reg. No. 200311994M)
Block 1026 Tai Seng Avenue
#07-3532 Singapore 534413
Tel: 6858 7318 Fax: 6282 5531

FLUIDIGM SINGAPORE PTE. LTD. :

In the presence of :

/s/ Tan Suan Hui

Name of witness : TAN SUAN HUI
NRIC No : 50110335J

Exhibit 21.1

List of Subsidiaries of the Registrant

Subsidiaries of Fluidigm Corporation (Delaware):
Fluidigm Japan K.K. (Japan)
Fluidigm Europe, BV (Netherlands)
Fluidigm Singapore Pte. Ltd. (Singapore)

Subsidiaries of Fluidigm Europe, BV (Netherlands):
Fluidigm France SARL (France)
Fluidigm UK Limited (United Kingdom)

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated December 3, 2010, in the Registration Statement (Form S-1) and related Prospectus of Fluidigm Corporation for the registration of shares of its common stock.

/s/ ERNST & YOUNG LLP

Palo Alto, California
December 3, 2010