

MICROFLUIDICS INTERNATIONAL CORP  
Form DEF 14A  
April 29, 2009

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

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of  
the Securities Exchange Act of 1934 (Amendment No.     )

Filed by the Registrant  
Filed by a o  
Party other  
than the  
Registrant

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- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material under Rule 14a-12

MICROFLUIDICS INTERNATIONAL CORPORATION

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

No fee required.

Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11.

- (1) Title of each class of securities to which transaction applies:
- (2) Aggregate number of securities to which transaction applies:
- (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (Set forth the amount on which the filing fee is calculated and state how it was determined):
- (4) Proposed maximum aggregate value of transaction:
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- o Fee paid previously with preliminary materials.
- o Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

- (1) Amount Previously Paid:
- (2) Form, Schedule or Registration Statement No.:
- (3) Filing Party:
- (4) Date Filed:

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MICROFLUIDICS INTERNATIONAL CORPORATION  
30 Ossipee Road  
Newton, Massachusetts 02464

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NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

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To Our Stockholders:

The 2009 Annual Meeting of Stockholders of Microfluidics International Corporation, a Delaware corporation (the “Company”), will be held on Thursday, June 4, 2009 at 9:00 a.m., local time, at the offices of the Company located at 30 Ossipee Road, Newton, Massachusetts, for the following purposes:

- (1) To elect a Board of Directors to serve for the ensuing year and until their respective successors have been duly elected and qualified.

The nominees the Board of Directors proposes to present for election are:

James N. Little  
Eric G. Walters  
George Uveges  
Leo Pierre Roy  
Michael C. Ferrara

- (2) To amend the Company’s Certificate of Incorporation to increase the number of authorized shares of common stock to 30,000,000 from 20,000,000.
- (3) To ratify the appointment of the firm of UHY LLP as independent auditors for the Company for the fiscal year ending December 31, 2009.
- (4) To transact such other business as may properly come before the meeting and any adjournments thereof.

Only stockholders of record on the transfer books of the Company at the close of business on April 24, 2009 are entitled to notice of, and to vote at, the meeting.

Please sign, date and return the enclosed proxy in the enclosed envelope at your earliest convenience. If you return your proxy, you may nevertheless attend the meeting and vote your shares in person.

All stockholders are cordially invited to attend the meeting.

By Order of the Board of Directors

/s/ James N. Little

James N. Little

Chairman of the Board of Directors

Newton, Massachusetts

April 28, 2009

IT IS IMPORTANT THAT YOUR SHARES BE REPRESENTED AT THE MEETING. WHETHER OR NOT YOU PLAN TO ATTEND THE MEETING, PLEASE SIGN, DATE AND MAIL THE ENCLOSED PROXY IN THE ENCLOSED ENVELOPE, WHICH REQUIRES NO POSTAGE IF MAILED WITHIN THE UNITED STATES.

This proxy statement and the form of proxy enclosed with this proxy statement are intended to be first mailed to stockholders on or about May 13, 2009.

**IMPORTANT NOTICE REGARDING THE INTERNET AVAILABILITY OF  
PROXY MATERIALS FOR THE 2009 ANNUAL MEETING**

The U.S. Securities and Exchange Commission recently adopted new e-proxy rules that require companies to post their proxy materials on the internet and permit them to provide only a Notice of Internet Availability of Proxy Materials to shareholders. For this proxy statement, we have chosen to follow the SEC's "full set" delivery option, and therefore, although we are posting a full set of our proxy materials (this proxy statement, the proxy card and our Annual Report to Shareholders for the fiscal year ended December 31, 2008) online, we are also mailing a full set of our proxy materials to our shareholders by mail. The Company's Proxy Statement for the 2009 Annual Meeting of Shareholders, Proxy Card and Annual Report to Shareholders for the fiscal year ended December 31, 2008, are available at: [www.proxyvote.com](http://www.proxyvote.com).

We are mailing a full set of our printed proxy materials to shareholders of record on or about April 24, 2009. On this date, all shareholders of record and beneficial owners will have the ability to access all of the proxy materials on the website referred to above. These proxy materials will be available free of charge.

PROXY STATEMENT

MEETING OF STOCKHOLDERS OF  
MICROFLUIDICS INTERNATIONAL CORPORATION  
TO BE HELD ON  
June 4, 2009

Proxies in the form enclosed with this proxy statement are being solicited by the Board of Directors of Microfluidics International Corporation, a Delaware corporation (the "Company"), for use at the Annual Meeting of Stockholders to be held on Thursday, June 4, 2009, at 9:00 a.m., local time, at the offices of the Company located at 30 Ossipee Road, Newton, Massachusetts 02464 and at any adjournments thereof (the "Meeting").

Only stockholders of record as of the close of business on April 24, 2009 will be entitled to notice of and to vote at the Meeting. As of that date, 10,371,782 shares of common stock, par value \$.01 per share (the "Common Stock"), of the Company were issued and outstanding and entitled to vote at the Meeting. The shares of Common Stock are the only outstanding voting securities of the Company. Stockholders are entitled to cast one vote for each share held of record.

An Annual Report to Stockholders, containing financial statements for the fiscal year ended December 31, 2008, is being mailed together with this proxy statement to all stockholders entitled to vote. This proxy statement and the form of proxy enclosed with this proxy statement are intended to be first mailed to stockholders on or about May 13, 2009.

All properly executed proxies returned in time to be counted at the Meeting will be voted as stated below under "Voting Procedures." Any stockholder giving a proxy has the right to withhold authority to vote for any individual nominee to the Board of Directors by writing that nominee's name in the space provided on the proxy.

Stockholders should return properly executed proxies to the address on the proxy cards. Execution of a proxy will not in any way affect a stockholder's right to attend the Meeting and vote in person. A stockholder may revoke a proxy at any time before it is voted at the Meeting by notifying the Secretary of the Company in writing at the address set forth above, by submitting a properly executed proxy bearing a later date, or by revoking the proxy at the Meeting. Attendance at the Meeting will not by itself constitute the revocation of a proxy.

In addition to the election of directors, the stockholders will consider a vote to ratify the Board of Directors' selection of the Company's auditors (as recommended by the Company's Audit Committee), and a vote to amend the Company's Certificate of Incorporation so as to increase the number of authorized shares of common stock of the Company to 30,000,000 from 20,000,000, each as further described in this proxy statement. Where a choice has been specified on the proxy with respect to these matters, the shares represented by the proxy will be voted in accordance with the specification and will be voted FOR these matters if no specification is indicated.

The Board of Directors of the Company knows of no other matters to be presented at the Meeting. If any other matter should be presented at the Meeting upon which a vote properly may be taken, shares represented by all proxies received by the Board of Directors will be voted with respect thereto in accordance with the judgment of the persons named as attorneys in the proxies.

## PROPOSAL 1

## ELECTION OF DIRECTORS

Each director of the Company is elected annually and holds office for the ensuing year and until his successor has been elected and qualified. The Company's By-laws state that the number of directors constituting the entire Board of Directors shall be determined by resolution of the Board of Directors. The Board of Directors has set the number of directors at five effective as of June 4, 2009.

Shares represented by all proxies received by the Board of Directors and not marked as withholding authority to vote for any individual director or for all directors will be voted FOR the election of all the nominees, unless one or more nominees is unable or unwilling to serve. The Board of Directors knows of no reason why any such nominee would be unable or unwilling to serve as a director, but if such should be the case, proxies may be voted for the election of some other person as the Board of Directors may recommend in his place, or for fixing the number of directors at a lesser number. The affirmative vote of a majority of the shares present, in person or by proxy, and entitled to vote on the election of directors is required to elect each member of the Board of Directors. See "Voting Procedures."

THE BOARD OF DIRECTORS RECOMMENDS THE ELECTION OF MR. LITTLE, MR. WALTERS, MR. UVEGES, MR. ROY, AND MR. FERRARA AS DIRECTORS, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR THEREOF UNLESS A STOCKHOLDER HAS INDICATED OTHERWISE ON THE PROXY.

## Directors and Executive Officers

Each director of the Company is elected annually and holds office for the ensuing year and until his successor has been elected and qualified. The names of the Company's other current directors and named executive officers and certain information about them are set forth below:

Name	Age	Title
Michael C. Ferrara	66	Chief Executive Officer, President and Director
Peter Byczko	41	Vice President of Finance and Chief Accounting Officer
William J. Conroy	53	Vice President—Operations and Engineering
James N. Little	68	Chairman of the Board
Leo Pierre Roy	51	Director
George Uveges	61	Director
Eric G. Walters	56	Director

MICHAEL C. FERRARA joined the Company on November 14, 2007 as the Chief Executive Officer and is a member of the Company's Board of Directors. Mr. Ferrara was most recently President and CEO of X-Rite Incorporated, a NASDAQ-traded company (XRIT). X-Rite develops, manufactures and markets color management solutions for industrial, commercial and retail applications. Prior to X-Rite, Mr. Ferrara was CEO of Marine Optical Group, CEO of N.I. World Trade, a trading subsidiary of National Intergroup (formerly National Steel) and held positions of increasing seniority over an 18-year period at Westinghouse Electric Corporation. Mr. Ferrara currently serves on the Board of Directors of Integration Capital & Trade, Inc., an investment company based in New York, New York, and the Board of Advisors of PureColor, Inc., a privately held company based in Santa Fe, New Mexico. Mr. Ferrara has a B.S in electrical engineering from Villanova University and completed the Program for

Management Development (PMD) at Harvard Business School.

PETER F. BYCZKO joined the company on March 12, 2009 as the Vice President of Finance. On March 31, 2009, he was appointed as the Chief Accounting Officer of the Company. Mr. Byczko was mostly recently the Director of Financial Operations and Development at Open Solutions, a leading provider of integrated computer systems and software for financial institutions around the world. Prior to Open Solutions, Mr. Byczko was a Senior Project Manager for Control Solutions International, a leading provider of internal audit and risk management solutions worldwide working with clients such as CA, Hewlett-Packard, and Bristol-Myers Squibb. Mr. Byczko served in various senior management positions in areas of financial reporting, acquisitions and treasury. Mr. Byczko practiced from 1989 to 1995 as a Certified Public Accountant with various national and regional accounting firms. Mr. Byczko holds a B.S. in accounting and finance from Nichols College.



WILLIAM J. CONROY joined the Company on March 18, 2008 as Vice President - Operations and Engineering. Prior to joining the Company, Mr. Conroy served as Director of Engineering and New Products at Optim Corporation and Senior Vice President of Production and Operations at Remote Reality Corporation, a designer and manufacturer of next-generation intelligent video systems for the military/defense and security business sectors, and as the operations manager at Northrop Grumman, Electronic Systems Division (ESD), in Canton, Mass., a global defense and technology company that provides innovative systems, products, and solutions in information and services, electronics, aerospace and shipbuilding to government and commercial customers worldwide. Mr. Conroy's responsibilities at Northrop Grumman included manufacturing, production control, materials, procurement, manufacturing engineering and quality assurance. Mr. Conroy earned his Bachelor of Science degree in ceramic engineering from Alfred University. Mr. Conroy has a ceramic pigment certification from Rutgers University; German ALPS language certification from Dartmouth College; is a certified Six-Sigma-Agile Specialist from Raytheon Missile Systems; and a Lean Green Belt from Northrop Grumman Corporation. Mr. Conroy is a member of the American Ceramic Society and the National Institute of Ceramic Engineers.

JAMES N. LITTLE has served as a Director of the Company since December 1995 and was appointed Chairman of the Board on December 13, 2007. Dr. Little provides consulting services to a number of laboratory instrumentation and analytical instrument companies. From December 2005 until August, 2006, Dr. Little served as Senior Vice President of Cetek Corporation, a position he also held from August 1998 until December 2001. From December 2001 until December 2005, he served as the President of Cetek, which is a biotechnology drug discovery company. From 1981 to August 1998, Dr. Little served as a Senior Vice President of Sales, Marketing and Business Development for Zymark Corporation (which was later acquired by Caliper Life Sciences), a manufacturer of scientific instrumentation. Prior to Zymark, Dr. Little was Senior Vice President of Waters Corp., a publicly held supplier of scientific instruments. Dr. Little currently serves as a director for both Horizon Technologies, based in Salem, New Hampshire, and Aushon Biosystems, based in Billerica, Massachusetts. Dr. Little serves on the Company's Compensation, Audit and Nominating and Corporate Governance Committees.

LEO PIERRE ROY has served as a Director of the Company since June 2000. Mr. Roy has more than 25 years of experience as a senior manager and consultant. Mr. Roy currently serves as a Director and officer of Houqua & Company, a privately held environmental consulting firm. Additionally, Mr. Roy is presently a Principal and Director of Environmental and Energy Services at Vanasse Hangen & Brustlin, Inc. (VHB), an engineering firm providing transportation, land development, and environmental services. Prior to joining VHB in September 2003, Mr. Roy was the Vice President and Chief Operating Officer of The Bioengineering Group, Inc., a firm engaged in consulting in the areas of erosion control, water quality, ecological restoration and bioengineering from September 2000 to September 2003. Between 1998 and 2000 he served as the President of Houqua & Company, Inc., a consulting firm specializing in strategic planning and development services. From 1997 to 1998, Mr. Roy served as President and Chief Operating Officer of Energy Answers Corporation, a designer, developer and owner of resource recovery, power, and recycling and solid waste management companies. From 1992 to 1996, Mr. Roy served first as Director of Waste Policy and Planning and later as Undersecretary of the Executive Office of Environmental Affairs for the Commonwealth of Massachusetts. From 1990 to 1991, Mr. Roy was the Regional Manager of Special Projects for Waste Management, Inc. From 1985 to 1989, he was the Vice President and Chief Operating Officer of Orne Enterprises, a venture capital, environmental technology holding company. Mr. Roy is the Chairman of the Company's Compensation Committee and serves on the Company's Audit and Nominating and Corporate Governance Committees.

GEORGE UVEGES has served as a Director of the Company since November 2005. Mr. Uveges is the founder and principal in the Tallwood Group, an angel investing firm that provides financial and management advisory services in addition to investment capital. Mr. Uveges was a member of the adjunct faculty at Newbury College from 2006 to 2008. From 2001 to 2004, Mr. Uveges served as the President and Chief Executive Officer of TranXenoGen, Inc., a development-stage, publicly-held biotech company focused on developing new methods for manufacturing therapeutic proteins and a portfolio of products, including generics, a cancer treatment and antibodies. He was also a

director of that company from 2001 to 2005. Prior to that, Mr. Uveges served as Chief Financial Officer at a number of companies and also practiced as a certified public accountant. Mr. Uveges is a member of the Board of Directors of Harvard Bioscience, Inc., a publicly held developer, manufacturer and marketer of products used in life science research, where he also serves as chairman of the audit committee. Mr. Uveges is also a member of the Board of Directors of Operation ABLE, a non-profit corporation. Mr. Uveges, a CPA, is a Member, American Institute of Certified Public Accountants, Financial Executives International, and National Association of Corporate Directors. Mr. Uveges is the Chairman of the Company's Nominating and Corporate Governance Committee, is a member of the Company's Audit and Compensation Committees and is a "financial expert" on the Audit Committee.

ERIC G. WALTERS has served as a Director of the Company since November 2005. Mr. Walters served as Vice President and Chief Financial Officer of AdvanSource Biomaterials Corporation (formerly known as CardioTech International, Inc.) a publicly traded company, which focuses on the development and manufacture of medical grade polymers, from October 2005 to February 2009. Prior to joining AdvanSource Biomaterials Corporation, Mr. Walters served as Vice President and Chief Financial Officer at Konarka Technologies, Inc., a developer of light-activated plastic (photovoltaic) material. Prior to joining Konarka, Mr. Walters served in various capacities at PolyMedica Corporation during a 13-year period, including Executive Vice President and Chief Financial Officer. Mr. Walters is a member of the Board of Directors of CorNova, Inc., a privately held developer of coronary stents and other medical devices. Mr. Walters, a CPA, is a Member, American Institute of Certified Public Accountants, a Fellow of the Massachusetts Society of Certified Public Accountants, and a member in Financial Executives International. Mr. Walters is the Chairman of the Audit Committee of the Board of Directors and is a "financial expert" on the Audit Committee.

### Significant Employee

THOMAI PANAGIOTOU was appointed Chief Technology Officer of the Company on July 23, 2008. Since January 1, 2005, Dr. Panagiotou held the position of Vice President of Research and Development, and joined the Company on March 31, 2003 as Director of Research and Development. Dr. Panagiotou is a Member of both the American Chemical Society, and the American Association of Pharmaceutical Scientists. Prior to joining the Company, Dr. Panagiotou served from 2000 to 2003 as Manager at Arthur D. Little, Inc. Prior to that, Dr. Panagiotou worked at TIAX, LLC, a consulting company where she was involved in the development of a pulmonary delivery device. From 1997 to 2000, Dr. Panagiotou was Principal Engineer at Physical Sciences, Inc., a company providing contract research and development services in aerospace, energy, environmental, manufacturing and medical applications. Dr. Panagiotou is 45 years old.

### Certain Relationships and Related Transactions

We are not now, nor have we been since the beginning of 2008, a party to any transaction, nor do we contemplate entering into any proposed transaction, with any related person (which term includes any of our directors or executive officers or any immediate family member of such directors or executive officers) the value of which exceeds \$75,385 (approximately one percent (1%) of the average of our total assets at year-end for the last two completed fiscal years), and in which any related person had or will have a direct or indirect material interest.

### Policies And Procedures For Related Party Transactions

Our Board of Directors reviews, approves and/or ratifies all transactions involving related persons. The purpose of the review is to determine that such transactions are conducted on terms not materially less favorable to us than what would be usual and customary in transactions between unrelated persons and, in the case of transactions involving Directors, to determine whether such transactions affect the independence of a Director in accordance with the relevant rules and standards issued by the Securities and Exchange Commission. Our Code of Ethics provides guidance on business relations between us and our Directors, officers, and employees. We filed our Code of Ethics with our Annual Report on Form 10-K in 2005. The Code of Ethics is available on our website at <http://www.mficcorp.com/nethics.html>.

### Section 16(a) Beneficial Ownership Reporting Compliance

During the fiscal year ended December 31, 2008, William Conroy failed to file in a timely fashion one report required by Section 16(a) of the Exchange Act. Specifically, Mr. Conroy received an option to purchase 20,000 shares of common stock on March 18, 2008. A Form 4 disclosing this grant was not filed until March 28, 2008. Based solely on a review of Forms 3, 4 and 5 and amendments thereto furnished to the Company by its reporting persons, no other director, officer or beneficial owner of more than ten percent of any class of securities of the Company failed to file on a timely basis any report as required by Section 16(a) of the Exchange Act during the most recent fiscal year.

### Board of Directors, Committees and Meetings

The business and affairs of the Company are managed on a day-to-day basis by the Company's management and executive officers, under the supervision and review of the Board of Directors. Each of the Directors, other than Mr. Ferrara, is independent in accordance with the standards of the Securities and Exchange Commission. In accordance with the disclosure requirements of the Securities and Exchange Commission, although we are not presently listed on any national securities exchange, each of the Directors, other than Mr. Ferrara, is independent in accordance with the standards of the American Stock Exchange. The Board of Directors of the Company held eight meetings and acted by unanimous written consent five times during the fiscal year ended December 31, 2008.



Ratification by a majority of the full Board of Directors is required with respect to decisions taken by the committees. During the fiscal year ended December 31, 2008, each of the directors attended more than 75% of (i) the total number of meetings of the Board of Directors, and (ii) the total number of meetings held by all committees on which each director served, for the period during which such director held such position. Written communications from the Company's stockholders can be sent to the Board of Directors at the Company's principal business address and marked to the attention of the specific Director with which the stockholder wishes to communicate, or if not to any specified director, then to the Chairman of the Board of Directors. All stockholder communications are forwarded to the specific Director to whom it is addressed. If addressed to the Board of Directors as a whole, the Chairman of the Board of Directors reviews each communication and determines, in his judgment, whether to forward it to the Board of Directors as a whole. This process has been adopted by a majority of the Company's independent directors.

The Company expects, absent extraordinary circumstances, that each member of the Board of Directors will attend the Company's Annual Meeting of Stockholders. Last year, all then current members of the Board of Directors personally attended the 2008 Annual Meeting of Stockholders.

#### The Nominating and Corporate Governance Committee

The Board of Directors of the Company has a standing Nominating and Corporate Governance Committee comprised of Messrs. Little, Roy and Uveges, each of whom is independent in accordance with the standards of the Securities and Exchange Commission. In accordance with the disclosure requirements of the Securities and Exchange Commission, although we are not presently listed on any national securities exchange, each of the Directors on the Nominating and Corporate Governance Committee is independent in accordance with the standards of the American Stock Exchange.

The Nominating and Corporate Governance Committee has a charter, which is reviewed annually by the Nominating and Corporate Governance Committee and the entire Board of Directors. The charter was filed with the Company's proxy statement in 2008, and is available on the Company's website at [http://www.mficcorp.com/index.php?option=com\\_content&task=view&id=44&Itemid=42](http://www.mficcorp.com/index.php?option=com_content&task=view&id=44&Itemid=42).

The Nominating and Corporate Governance Committee reviews and reports to the Board on an occasional basis regarding the size and composition of the Board and recommends to the Board nominees for election to the Board. The Nominating and Corporate Governance Committee met twice during 2008.

The Nominating and Corporate Governance Committee accepts and considers nominations by directors, executive officers, employees, advisors, consultants and security holders. The Company may hire an outside consultant to help in the search for a new director or executive officer. Stockholders should submit nominations for director positions in writing to the Company's Board of Directors, which should be mailed to the Company's principal mailing address, addressed to the attention of the Corporate Secretary. When the Nominating and Corporate Governance Committee becomes aware of a vacant seat on the Board of Directors, whether because of retirement or resignation of a director or otherwise, the Nominating and Corporate Governance Committee, or a subcommittee thereof, reviews all nominations received, and recommends whether nominees should be submitted to the full Board of Directors. Neither the Nominating and Corporate Governance Committee nor the Board of Directors has established any specific minimum criteria or qualifications that a nominee must possess. The Nominating and Corporate Governance Committee and the Board of Directors review all nominees on the basis of the nominee's qualifications, including the nominee's independence, education and business experience.

#### The Audit Committee

The Audit Committee, which currently consists of Messrs. Walters, Little, Roy and Uveges, each of whom is an independent director under the standards of the Securities Exchange Commission, oversees the accounting, financial reporting and tax functions of the Company, including matters relating to the internal control over financial reporting and the appointment and activities of our independent accountants. In accordance with the disclosure requirements of the Securities and Exchange Commission, although we are not presently listed on any national securities exchange, each of the members of the Audit Committee is independent in accordance with Section 121(B) of the listing standards of the American Stock Exchange. Mr. Walters, the Chairperson of the Audit Committee, and Mr. Uveges are each an Audit Committee “financial expert,” as defined under the rules of the Securities Exchange Commission. The Audit Committee met four times last year.

The Audit Committee has a charter, which is reviewed at least annually by the Audit Committee and the entire Board of Directors. The Audit Committee charter was last revised on January 16, 2003 and was filed with the Company’s proxy statement in 2005. The Audit Committee charter is available on the Company’s website at [http://www.mficcorp.com/index.php?option=com\\_content&task=view&id=44&Itemid=42](http://www.mficcorp.com/index.php?option=com_content&task=view&id=44&Itemid=42).

### Compensation Committee Interlocks and Insider Participation

The Compensation Committee, which currently consists of Messrs. Little, Roy and Uveges, determines who receives stock options under the Company's stock plans (except for the 2006 Stock Plan, under which grants that are automatically made to non-employee directors) and also reviews and approves senior executive remuneration. Each of the members of the Compensation Committee is independent in accordance with the standards of the Securities Exchange Commission. In accordance with the disclosure requirements of the Securities and Exchange Commission, although we are not presently listed on any national securities exchange, each of the members of the Compensation Committee is independent in accordance with the standards of the American Stock Exchange. The Compensation Committee held three meetings during the fiscal year ended December 31, 2008.

The Compensation Committee adopted a charter on December 8, 2005, which was filed with the Company's proxy statement in 2006. The Compensation Committee charter is available on the Company's website at [http://www.mficcorp.com/index.php?option=com\\_content&task=view&id=44&Itemid=42](http://www.mficcorp.com/index.php?option=com_content&task=view&id=44&Itemid=42).

During the fiscal year ended December 31, 2008:

no executive officer of the Company served as a member of the compensation committee of another entity, one of whose executive officers served on the Compensation Committee of the Company;

no executive officer of the Company served as a director of another entity, one of whose executive officers served on the Compensation Committee of the Company; and

no executive officer of the Company served as a member of the compensation committee of another entity, one of whose executive officers served as a director of the Company.

## EXECUTIVE COMPENSATION

### Compensation Discussion and Analysis

This section discusses the material elements of compensation awarded to, earned by or paid to the executive officers identified in the Summary Compensation Table in this proxy statement (whom we refer to as our named executive officers).

The Compensation Committee of our Board of Directors generally has responsibility for reviewing and determining on both an annual and an as-needed basis the compensation of our named executive officers, directors, and key employees and reporting to the Board regarding the foregoing. The Compensation Committee (also referred to as the “Committee”) also has responsibility for administering our stock plan, determining the number of stock options to be granted under the plan and reporting to the Board regarding the foregoing. None of the named executive officers are members of the Compensation Committee. The current Compensation Committee members are Leo Pierre Roy (Chairman), James N. Little and George Uveges.

### Overview of Compensation Programs and Objectives

The objectives of the Compensation Committee in recommending the levels and components of compensation for the named executive officers and key employees are to:

1. Attract, motivate and retain talented and dedicated executives and key employees;
2. Motivate performance to achieve our established key performance metrics, goals and objectives; and
3. Provide both cash and equity incentives that align the interests of the named executive officers and key employees with the long-term interests of our stockholders.

The Committee reviews the achievement of corporate goals and individual contributions by our executives to our Company’s success. The Committee monitors the results of our executive compensation program to assure that the compensation paid to the named executive officers and key employees provides overall competitive pay levels and appropriately rewards performance. The Committee relies on judgment and not upon rigid guidelines or formulas in determining the amount or mix of compensation elements for each named executive officer and key employee. Factors affecting the Committee’s judgment include performance compared to strategic goals, the nature of the named executive officer’s or key employee’s responsibilities and his or her effectiveness in leading our initiatives to achieve our goals. Our Chief Executive Officer, as the manager of the members of the executive team, assesses the executives’ and key employees’ individual contributions to their respective departmental goals and makes recommendations to the Committee with respect to increases in base salary, discretionary bonus and long-term incentive awards, for each member of the executive team. The Committee evaluates, discusses and approves or modifies these recommendations. Each member of the Board who is independent in accordance with the standards of the Securities and Exchange Commission is permitted to attend the Committee meetings and participate in the discussion. However, approval of each named executive officer’s and key employee’s compensation is made by the Committee and recommended to the Board for ratification. As described in more detail below, the material components of the named executive officers’ and key employees’ compensation include base salary, discretionary bonus, long-term incentive awards, limited change-in-control benefits and related severance protection, and other customary employee benefits. The Committee reviews the total compensation package for each named executive officer and key employee, including base salary, bonuses and incentive awards, and adjusts these individual components to achieve a desired pay and performance incentive package. The Committee believes that each element of our executive and key employee compensation program helps us to achieve one or more of our compensation objectives.



Base salaries, option grants, change-in-control benefits and other employee benefits are all primarily intended to attract and retain qualified executives and key employees. The value of these components in any given year is less dependent on performance than the other elements that comprise our executives' and key employees' compensation package. The Committee believes that we need to provide the named executive officers and key employees with a level of predictable compensation in order to attract and retain top-caliber executives and key employees' and reward their continued services. The Committee's general philosophy is that discretionary bonuses and long-term incentive compensation should fluctuate with our success in achieving financial and other goals, and that we should continue to use long-term compensation such as stock options to align stockholder interests with the interests of the executives and key employees. The Committee also believes that a mix of longer-term and short-term elements allows us to achieve the dual goals of attracting and retaining executives and key employees while motivating their continued performance and aligning their financial interests with those of our stockholders.

The Committee has used relevant data points for comparable companies, such as salary surveys, to assist it in determining the compensation for each of our named executive officers. The Committee has found it difficult to benchmark the compensation levels of our named executive officers within a peer group of comparable companies due to the unique nature, size, and global reach of our business and technology. The Committee has evaluated the compensation practices of other high technology companies, including other publicly-held advanced materials, advanced technologies companies, and small capital equipment manufacturers, in Massachusetts, in determining an appropriate level and mix of compensation. Among other sources, the Committee used the Watson Wyatt Executive Management Survey 2007/2008, a Mercer Compensation Management Survey, analyses of benchmark job data from Salary.com, and the 2007 Equity Report from Equilar, Inc.

The Committee subscribes to the philosophy of "Pay-for-Performance", linking elements of each executive officer's compensation to their job performance and their role in our overall financial performance. Performance is tied to specific goals and metrics, generally compared to the annual financial plan adopted by the Company. Performance is considered on an annual basis, with goals for revenue and gross margin, as well as execution of critical performance goals such as strategic planning, technology advancement, and new product development and introduction. In considering our compensation strategy, the Committee acknowledges the goal of building stockholder value. To do this the executive officers need to:

- grow the Company;
- increase profitability;
- improve quality;
- increase customer focus;
- advance the technology;
- penetrate additional markets and diversify by industry and geography; and

• develop employees to succeed by giving them career paths and internally developing the future leadership of the Company.

#### Current Material Elements

**Base Salary.** In contrast to 2007, there was significant restructuring of senior management in 2008. Establishment of base salaries was done through consultation between the Compensation Committee and the CEO as part of the recruiting and hiring process. Base salary is paid in cash.

The Committee customarily determines any adjustments to the base salary of each of our named executive officers at the end of the year preceding the year in which the adjustment will take effect or at the start of the year in which the adjustment will take effect. In December 2005, the Committee, after reviewing management's budget/forecast for 2006, recommended that the base salaries of our named executive officers remain unchanged for 2006. The Board adopted that position. The base salary that we paid to each of our named executive officers in 2006 is the amount reported for such officer in the line corresponding to 2006 under the "Salary" column of the Summary Compensation Table below. As a result of our strong financial performance in 2006, which included an increase in revenue of 35% compared to 2005 and a record performance with respect to revenues in the fourth quarter of 2006, and based on management's budget/forecast for 2007 and a desire to account for inflation in the general economy, the Board adopted increases in base salary at year-end 2006 for 2007 of approximately 12% for Mr. Gruverman and

approximately 4.5% for each of the other named executive officers. The base salary that we paid to each of our named executive officers in 2007 is the amount reported for such officer in the line corresponding to 2007 under the "Salary" column of the Summary Compensation Table below. At the end of 2007, the Committee recommended to the Board that base salaries in 2008 remain at 2007 levels due to an anticipated worsening of general economic conditions and its potential negative effect on our financial performance for 2008. The Board adopted that position. The base salary that we paid to each of our named executive officers in 2008 is the amount reported for such officer in the line corresponding to 2008 under the "Salary" column of the Summary Compensation Table below.

**Discretionary Bonuses.** The Committee uses its discretion in recommending discretionary bonuses. That discretion includes whether to grant bonuses at all, the formula for determining the amount of the bonuses, and the individuals participating in the discretionary bonus pool. In setting bonus targets, the Committee considers the expected contributions of the individuals based on their Key Performance metrics, and the anticipated financial performance of the Company. Each employee eligible for a discretionary bonus has Key Performance metrics established at the beginning of the year in discussions between the employee and his or her supervisor. These Key Performance metrics are reviewed by the Compensation Committee, which uses them at year end, in consultation with the Chief Executive Officer, in determining eligibility for a discretionary bonus. Discretionary bonuses, if any, for our named executive officers are paid in cash upon the achievement of certain goals. Such bonuses are structured either as payments on an individual basis to a particular named executive officer or as payments to some or all of the named executive officers from a bonus pool to which they are entitled to a certain percentage. The Committee has customarily determined whether or not to grant discretionary bonuses to any of our named executive officers at the end of the year preceding the year in which the bonus is granted or at the start of the year in which the bonus is granted. The Committee may recommend that discretionary bonuses be paid on an individual basis to a particular named executive officer using criteria which the Committee believes to be relevant, such as the performance of the particular officer or the accomplishment of specific objectives by such officer, as well as other factors such as our profitability, revenue, cash flow, customer generation, market share and industry position. In connection with the senior management restructuring during 2008, the amount and criteria for the potential bonuses for 2008 was determined through consultation between the Compensation Committee and the CEO as part of the recruiting and hiring process.

No formal discretionary bonus plan was established at the end of 2007 for 2008, except for the CEO. As we did not meet our financial goals for 2008 no bonus was earned by the CEO for 2008. As noted above, bonus potential was addressed on an individual basis as named executive officers were hired. Based on achievement of certain performance metrics, including improvements in quality standards, a modest bonus was earned by Mr. Conroy in 2008 and is expected to be paid in 2009.

In December 2005, the Committee recommended that our named executive officers participate in a bonus pool for possible payment during 2006 after actual financial performance became measurable. The pool was established as a function of our revenue and gross profit margin based on six-month and twelve-month results. The named executive officers' percentage of participation was determined pro rata based on their salaries. The Board adopted the Committee's recommendation and established the bonus pool for 2006. Bonuses from the 2006 pool were to be paid at mid-year and following year-end depending on the finalized financial results for the respective accounting period, as set forth below.

If at June 30, 2006, minimum revenue and gross margin for the six months then ended were at the minimum level indicated in the table below, the amount shown in the final column of such table would be placed in the mid-year bonus pool.

June 30, 2006

Six-month minimum revenue	Six-month minimum gross margin	Placed in mid-year bonus pool
\$6.6 million	52.0%	\$ 15,000

If at December 31, 2006, minimum revenue and gross margin for the twelve months then ended were at the minimum levels indicated in the table below, the amount(s) shown in the final column of such table would be placed in the year-end bonus pool.

December 31, 2006

Twelve-month minimum revenue	Twelve-month minimum gross margin	Placed in year-end bonus pool
\$14.0 million	52.0%	\$ 25,000
\$15.0 million	52.0%	Additional \$25,000
\$15.6 million	52.0%	Additional \$25,000

Since our revenue for the six-months ended June 30, 2006 exceeded the Committee's threshold of \$6.6 million, with a minimum gross profit margin of 52%, and our revenue for the twelve-months ended December 31, 2006 exceeded the Committee's threshold of \$15.6 million, with a minimum gross profit margin of 52%, we placed \$15,000 and \$75,000, respectively, in the bonus pools for the six-month and twelve-month periods and allocated the bonuses among the named executive officers. The corresponding bonuses that we paid to each of our named executive officers for fiscal year 2006 are shown in the "Non-Equity Incentive Plan Compensation" column of the Summary Compensation Table below.



In December 2006, the Committee recommended that our named executive officers participate in a bonus pool for possible payment during 2007 after actual financial performance became measurable. Similar to the prior year, the pool was established as a function of our revenue and gross profit margin based on six month and twelve month results. The named executive officers' percentage of participation was determined based on their expected contribution to our financial performance and the total compensation targets for such individuals. The bonus pools at mid-year and following year-end were allocated by the Committee to the following individuals in the following percentages:

- a. I. Gruverman—25%
- b. R. Bruno—25%
- c. T. Hoarty—20%
- d. J. Swig—15%
- e. D. Riordan—15%

The Board adopted the Committee's recommendation and established the bonus pool for 2007. Bonuses from the 2007 pool were to be paid at mid-year and following year-end depending on the finalized financial results for the respective accounting period, as set forth below.

If at June 30, 2007, minimum revenue and gross margin for the six months then ended were at the minimum levels indicated in the table below, the amount(s) shown in the final column of such table would be placed in the mid-year bonus pool.

June 30, 2007

Six-month minimum revenue	Six-month minimum gross margin	Placed in mid-year bonus pool
\$8.0 million	54.0%	\$ 15,000
\$8.5 million	54.5%	Additional \$15,000
\$9.0 million	55.0%	Additional \$20,000

The maximum amount that could have been placed in the mid-year bonus pool at June 30, 2007 was \$50,000, an increase of more than three-fold from the prior year. If the mid-year revenue and gross margin goals were not attained, the applicable portion of the bonus pool set forth in the last column of the above table would be forfeited and would not be available for distribution at year-end or any other time.

If at December 31, 2007, minimum revenue and gross margin for the twelve months then ended were at the minimum levels indicated in the table below, the amount(s) shown in the final column of such table would be placed in the year-end bonus pool.

December 31, 2007

Twelve-month minimum revenue	Twelve-month minimum gross margin	Placed in year-end bonus pool
\$16.5 million	54.0%	\$ 35,000
\$17.5 million	54.5%	Additional \$30,000

\$18.5 million	55.0%	Additional \$25,000
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The maximum amount that could have been placed in the year-end bonus pool at December 31, 2007 was \$90,000, an increase of 20% from the prior year. The mid-year and year-end goals set forth above were minimum thresholds. The Board reserved the right to make further bonus recommendations if we achieved higher levels of revenue and gross margin. However, financial performance between the levels indicated was not to be prorated.

We did not achieve our financial goals for 2007 and did not attain the revenue and gross margin targets described above. As a result, no bonuses were earned under the bonus pool in 2007, as shown in the "Non-Equity Incentive Plan Compensation" column of the Summary Compensation Table below.

The Committee may recommend that discretionary bonuses be paid on an individual basis to a particular named executive officer using criteria which the Committee believes to be relevant, such as the performance of the particular officer or the accomplishment of specific objectives by such officer, as well as other factors such as our profitability, revenue, cash flow, customer generation, market share and industry position. The additional bonus that we paid to our President and Chief Operating Officer, Mr. Robert P. Bruno, was the result of our achievement of the revenue and gross profit margin for the twelve-months ended December 31, 2006 set forth above is shown in the "Non-Equity Incentive Plan Compensation" column of the Summary Compensation Table below. In December 2006, the Board adopted a Special Incentive Compensation Program for Mr. Gruverman that could have resulted in payments to Mr. Gruverman in 2007 in a maximum aggregate amount of \$50,000 if certain personal and Company milestones were met. Mr. Gruverman did not receive any bonus payments in 2007 under this Program.

No formal discretionary bonus plan was established for 2008, except for Mr. Ferrara. Instead, bonus potential was addressed on an individual basis as named executive officers were hired. Due to our overall financial performance in 2008, with the exception of Mr. Conroy described above, no bonuses were paid during that year to any named executive officer, including neither of Mr. Ferrara or Mr. LeClair pursuant to their employment agreement and offer letter, respectively. Please see the "Employment Agreements" section following the "Summary Compensation Table" below for additional information.

**Long-Term Incentive Compensation.** Periodically, the Committee grants long-term incentive compensation to our named executive officers in order to provide a long-term incentive which is directly tied to the performance of our stock. These grants provide an incentive to maximize stockholder value by providing the executives an equity interest which further aligns their interests with those of the stockholders. Vesting periods associated with such grants are used to retain our named executive officers and to emphasize the long-term aspect of contribution and performance. In making grants of long-term incentive compensation to our named executive officers, the Committee considers a number of factors, including our performance, the performance of such persons, the achievement of specific delineated goals, the responsibilities of such persons, the number of stock options and other awards each such person currently possesses and the underlying value of the options and other awards held.

Our stockholders adopted our 2006 Stock Plan on June 20, 2006. Upon the adoption of the 2006 Stock Plan, we ceased granting new options and other awards under our 1988 Stock Plan and our 1989 Non-Employee Director Plan. The Committee will continue to administer our 1988 Stock Plan and our 1989 Non-Employee Director Plan so long as awards granted under such plans remain exercisable. Under the 2006 Stock Plan, the Committee may grant awards in the form of stock options, restricted share rights, performance share rights and stock appreciation rights.

**Stock Options.** Pursuant to the terms of the 2006 Stock Plan, stock options granted to our named executive officers usually have a term of ten years. The exercise price of these grants is 100% of the closing price of the underlying Common Stock on the date of grant. In general, the options granted to our named executive officers vest in equal annual installments over a four-year period beginning one year after the date of grant. The Committee may, in certain instances, adjust the vesting period for performance-based options. In 2008 the Committee decided to change its approach to granting options by eliminating an automatic option grant of five percent (5%) of salary when a new employee was hired. Instead, an option grant upon hire is now considered on a case-by-case basis. The Committee also reconsidered the biannual option grant of five percent (5%) of salary, and decided that option grants would be based on performance, with management recommending the distribution of a pool of options to non-executive employees, depending on individual contribution. The Committee will continue to determine any option grants to executives in its discretion.

**Restricted share rights, performance share rights and stock appreciation rights.** Restricted share rights typically "cliff vest," all at one time, at a date several years subsequent to their grant date. Performance restricted share rights vest upon the achievement of milestones as defined by the Committee. Stock appreciation rights, which may be paid in cash, allow the Committee to award units that derive their value from the appreciation in our stock without the issuance of additional shares. We did not issue any awards of restricted share rights, performance share rights or stock appreciation rights to our named executive officers in 2006, 2007 or 2008. Awards of restricted stock and stock appreciation rights are not currently intended to comprise a major part of our long-term incentive compensation strategy. The Committee may elect, however, from time to time, to grant these types of awards as particular situations arise.

The Committee has customarily determined whether or not to grant long-term incentive compensation to our named executive officers at the end of a year or at the start of a year. The Committee adopted a new policy in 2008 to grant long-term incentive compensation based upon the named executive officers' performance after the conclusion of the year in which the performance occurred. This approach provides the Committee with a retrospective view on the



performance of such individuals before deciding whether to grant the incentive compensation. The aggregate amount as determined under FAS No. 123R recognized for purposes of our financial statements for 2007 and 2008 with respect to options granted to the named executive officers is shown in the “Summary Compensation Table” below. The grant date value of the options and other long-term incentive compensation awarded to the named executive officers in 2007 and 2008 as determined under FAS No. 123R for purposes of the financial statements is shown in the “Grants of Plan-Based Awards Table” below. The “Grants of Plan-Based Awards Table” and related narrative “Description of Summary Compensation and Plan-Based Awards Tables” section below provide additional detail regarding the options and other long-term incentive compensation granted to the named executive officers in 2007 and 2008, including the vesting and other applicable terms.

Equity Grant Practices. The Committee may grant awards to our named executive officers or other eligible participants under our 2006 Stock Plan at any time during the year, including in connection with the hiring or promotion of employees or based upon other special circumstances or performance. In accordance with longstanding policy, we do not backdate or reprice options or grant options retroactively. In addition, we do not coordinate grants of options so that they are made before announcements of favorable information, or after announcements of unfavorable information. Our options are granted at fair market value (deemed to be the closing price of the underlying Common Stock on the date of grant) on a fixed date or event (such as the first Board meeting following an employee's hire); with all required approvals obtained in advance of or on the actual grant date. Board and Compensation Committee meetings are generally scheduled months in advance and scheduling decisions are made without regard to our anticipated earnings or other major announcements. In 2006, we ceased our general practice of granting options to new employees on, or effective as of, their date of hire and instead instituted a policy, subject to limited exceptions at the discretion of the Board, whereby options are granted to such individuals effective as of the next regularly scheduled Board meeting following their date of hire. In 2008, we ceased our general practice of granting options to all new employees. Instead, options for new employees are determined on a case by case basis as part of their overall compensation package and such options are granted at the next regularly scheduled board meeting following their date of hire.

Change-in-Control Benefits and Severance Protection. The change-in-control benefits and related severance protection provided to each of our named executive officers include the provisions in our 2006 Stock Plan that accelerate the vesting of certain awards under certain circumstances upon our change in control. Pursuant to our 2006 Stock Plan, outstanding stock options, restricted stock and stock appreciation rights granted to a named executive officer may be assumed by a successor corporation or accelerated if not assumed. In addition, 50% of the unvested portion of an award will accelerate if, within 12 months following a change in control, the successor corporation for a reason other than cause terminates the employment of a named executive officer who holds an award pursuant to the 2006 Stock Plan. Please see the "Employment Agreements" section following the "Summary Compensation Table" below for a description of additional payments that may be made to certain of the named executive officers following a change in control.

Other Compensation and Benefits. Our named executive officers participate in the same group insurance and employee benefit plans as our other salaried employees. We do not provide loans or other perquisites to our named executive officers. The only exception is a \$100,000 life insurance policy on former President Robert Bruno for which we paid the premium. Premium payments in 2008 were \$2,340, compared to \$1,607 in 2007 and \$1,314 in 2006.

#### Employment Agreements

We have employment agreements with certain of our named executive officers providing for payments upon termination under certain circumstances and/or following a change in control. These payments are designed to provide our named executive officers with continued compensation for a discrete period of time in limited situations where their employment is unexpectedly terminated. In addition, as noted above, upon a change in control, the vesting of certain awards made to our named executive officers under the 2006 Stock Plan may accelerate.

#### Stock Ownership Guidelines

The Company currently does not require our directors or named executive officers to own a particular amount of our Common Stock. The Committee recommends stock holdings among the directors and named executive officers to provide motivation and to align this group's interests with those of our stockholders. All of our directors and the CEO are stockholders of the Company.

#### Return of Incentive Compensation by an Executive

In the case of a significant restatement of our financial results caused by a named executive officer's fraudulent or intentional misconduct, the Board may take action to seek reimbursement of some portion of performance-based or incentive compensation that was paid or awarded to such executive which would not have been paid or awarded if such compensation had been calculated based on the restated financial results. The Audit Committee of the Board will determine whether a financial restatement is significant and will make an initial determination of the cause of the restatement.

#### Compensation Consultant

The Committee does not have any contractual arrangement with any compensation consultant who has a role in determining or recommending the amount or form of named executive officer or director compensation. In the future, in its sole discretion, the Committee may engage or seek the advice of one or more compensation consultants.

#### Compliance with Section 162(m)

The Committee currently intends for all compensation paid to our named executive officers to be tax deductible to the Company pursuant to Section 162(m) of the Internal Revenue Code of 1986, as amended (“Section 162(m)”). Section 162(m) provides that the Company cannot deduct for Federal income tax purposes compensation paid to our named executive officers in excess of \$1,000,000, unless, in general, (1) such compensation is performance-based, established by a committee of outside directors and objective, and (2) the plan or agreement providing for such performance-based compensation has been approved in advance by stockholders. The Committee believes that stockholder interests are best served by not restricting the Committee’s discretion and flexibility in crafting compensation programs, even though such programs may result in certain non-deductible compensation expenses. Accordingly, in the future, the Committee may determine to adopt a compensation program that does not satisfy the conditions of Section 162(m) if in its judgment, after considering the additional costs of not satisfying Section 162(m), such program is appropriate. However, the Committee does not anticipate paying any named executive officers in excess of \$1,000,000 in the near term.

#### COMPENSATION COMMITTEE REPORT

The Committee has reviewed and discussed the above Compensation Discussion and Analysis with management. Based on its review and discussions with management, the Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be incorporated by reference in the Company’s Annual Report on Form 10-K for 2008 and included in this proxy statement.

Leo Pierre Roy (Chairman)  
James N. Little  
George Uveges

## Summary Compensation

The following table sets forth for the fiscal years ended December 31, 2008, 2007 and 2006, respectively, a summary of the compensation paid to our named executive officers.

## SUMMARY COMPENSATION TABLE

FOR THE YEARS ENDED DECEMBER 31, 2008, 2007 AND 2006

Name and Principal Position	Year	Salary (\$)	Bonuses (\$)	Stock Option Awards		Non-Equity Incentive Plan Compensation (\$)	Change in Pension Value and Non Qualified Deferred Compensation (\$)	All other Compensation (\$)	Total (\$)	
				(\$)	(\$)					
Michael C. Ferrara Chief Executive Officer	2008	230,000	0	0	0	0	0	0	230,000	
	2007	29,192	(1)	0	0	12,234	(2)	0	41,426	
	2006	0	0	0	0	0	0	0	0	
Brian E. LeClair Executive Vice President, Chief Financial Officer and Treasurer (former)	2008	108,154	(3)	0	0	13,782	(4)	0	121,936	
	2007	0	0	0	0	0	0	0	0	
	2006	0	0	0	0	0	0	0	0	
William J. Conroy Vice President Operations and Engineering	2008	119,423	(5)	0	0	8,614	(4)	0	5,000	133,037
	2007	0	0	0	0	0	0	0	0	
	2006	0	0	0	0	0	0	0	0	
Irwin J. Gruverman	2008	0	0	0	0	0	0	0	0	

Chief Executive Officer (former)	2007	140,000		0	0	0	0	0	25,679	(6)	165,679
	2006	125,000		0	0	0	22,050	(7)	0		147,050
Robert P. Bruno, President, Chief Operating Officer (former)	2008	85,000	(8)	0	0	0	0	0	105,199	(9)	190,199
	2007	170,000		0	0	4,800	(2)	0	1,607	(10)	176,407
	2006	163,000		0	0	0	53,710	(11)	0	1,314	218,024
Jack M. Swig, Vice President, Corporate Development and General Counsel (former)	2008	75,000	(12)	0	0	0	0	0	100,286	(13)	175,286
	2007	140,000	(14)	0	0	2,400	(2)	0	0		142,400
	2006	115,000		0	0	0	20,250	(7)	0	0	135,250
Dennis Riordan, Controller (former)	2008	135,000		0	0	0	0	0	0		139,420
	2007	115,000		0	0	2,400	(2)	0	0		117,400
	2006	110,000		0	0	0	18,990	(7)	0	0	128,990

(1) Michael C. Ferrara compensation for partial year based on \$230,000 annual base salary.

(2) The option awards reflect the dollar amount recognized for financial statement reporting purposes in accordance with SFAS No. 123R with respect to stock option grants in 2007. The assumptions used in the calculation of these amounts are included in Note 1 to the Company's audited consolidated financial statements for the year ended December 31, 2007 included in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 21, 2008 and incorporated by reference herein.

(3) Brian E. LeClair compensation for partial year based on \$190,000 annual base salary.

(4) The option awards reflect the dollar amount recognized for financial statement reporting purposes in accordance with SFAS No. 123R with respect to stock option grants in 2008. The assumptions used in the calculation of these amounts are included in Note 1 to the Company's audited consolidated financial statements for the year ended December 31, 2008 included in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 30, 2009 and incorporated by reference herein.

- (5) William J. Conroy compensation for partial year based on \$150,000 annual base salary.
- (6) Represents payment to Irwin J. Gruverman of accrued vacation upon departure from employment.
- (7) Indicates the amount earned by the named executive officer in 2006 in connection with the bonus pool described under "Compensation Discussion and Analysis—Current Material Elements—Discretionary Bonuses."
- (8) Robert P. Bruno compensation for partial year based on \$170,000 annual base salary.
- (9) Represents payment of the following amounts to Robert P. Bruno upon departure from employment: (i) six (6) months severance payment, (ii) medical and dental insurance coverage through December 31, 2008, (iii) pre-existing life insurance coverage through December 31, 2008, and (iv) accrued vacation upon departure from employment. Please see "Employment Agreements—Robert P. Bruno" in the Company's Schedule 14A filed with the Securities and Exchange Commission on April 29, 2008 for additional information, and incorporated by reference herein.
- (10) The Company paid a quarterly premium for additional life insurance for Mr. Bruno.
- (11) In 2006, Mr. Bruno earned \$28,710 in connection with the bonus pool and \$25,000 in connection with an additional bonus as a result of our financial performance, each described under "Compensation Discussion and Analysis—Current Material Elements—Discretionary Bonuses."
- (12) Jack M. Swig compensation for partial year based on \$150,000 annual base salary.
- (13) Represents payment of the following amounts to Jack M. Swig upon departure from employment: (i) six (6) months severance payment, (ii) medical and dental insurance coverage through December 31, 2008, (iii) pre-existing life insurance coverage through December 31, 2008, and (iv) accrued vacation upon departure from employment. Please see "Employment Agreements—Jack M. Swig" in the Company's Schedule 14A filed with the Securities and Exchange Commission on April 29, 2008 for additional information, and incorporated by reference herein.
- (14) Jack M. Swig salary represents pro rated amount of base salary that became effective as of April 26, 2007. Please see "Employment Agreements—Jack M. Swig" in the Company's Schedule 14A filed with the Securities and Exchange Commission on April 29, 2008 for additional information, and incorporated by reference herein.

#### Employment Agreements

As of November 14, 2007, we entered into an employment agreement with Michael C. Ferrara as described below. As of June 4, 2008, we entered into a letter agreement with Brian E. LeClair as described below. Please see the "Employment Agreements" section of our Schedule 14A filed with the Securities and Exchange Commission on April 29, 2008 for a description of our prior employment agreements with Robert P. Bruno, Jack M. Swig and Dennis P. Riordan, which is incorporated by reference herein.

#### Michael C. Ferrara

On November 14, 2007, (the "Ferrara Effective Date"), the Company entered into an employment agreement with Michael C. Ferrara (the "Ferrara Agreement") in connection with Mr. Ferrara's appointment as Chief Executive Officer and member of the Company's Board of Directors. Mr. Ferrara will receive a base salary of \$230,000 per year (the

“Base Salary”). The Base Salary shall be subject to annual review by the Board. Any increase in the Base Salary shall be determined by the Board in its sole discretion. The term of Mr. Ferrara’s employment agreement (the “Employment Period”) commenced on the Ferrara Effective Date and continues until such time as is specified by either party in its written notice to the other given no less than thirty (30) days’ in advance thereof, or its termination as described below, whichever occurs first. In connection with compensation for calendar year 2008, Mr. Ferrara shall be eligible to receive performance bonuses at the discretion of the Board and he will receive the Company’s employee benefits as they may exist from time to time, including health insurance, life insurance, 401k and stock purchase plans. The Compensation Committee and Mr. Ferrara will work together to create and implement performance bonus standards for future years of Mr. Ferrara’s employment with the Company under the Ferrara Agreement. Mr. Ferrara will be eligible to earn and use three (3) weeks of paid vacation per calendar year, accruing at the rate of 1.25 days per month. Under the Ferrara Agreement, the Company granted Mr. Ferrara an option to purchase 300,000 shares of the Company’s common stock (the “Option”). This grant was effective, and the exercise price of the Option was established as of the close of trading, on the Ferrara Effective Date. The Option was granted pursuant to, and subject to the terms and conditions of, the Company’s 2006 Stock Plan. The Option vests in four equal annual installments commencing on the first anniversary of the Ferrara Effective Date. If a Change of Control (as defined in the Ferrara Agreement) occurs during the Employment Period, the Option shall immediately become vested as to all 300,000 shares.



In the event that (i) Mr. Ferrara is terminated for Cause (as defined in the Ferrara Agreement), (ii) Mr. Ferrara voluntarily terminates his employment for a reason other than Good Reason (as defined in the Ferrara Agreement) or (iii) Mr. Ferrara dies or becomes Permanently Disabled (as defined in the Ferrara Agreement), the Company will have no obligation to provide Mr. Ferrara with any compensation or severance package, except for salary and benefits accrued prior to the termination of employment.

In the event that Mr. Ferrara's employment is terminated by the Company "without Cause", or by Mr. Ferrara for Good Reason (each as defined in the Ferrara Agreement), or by the Company for any reason within one hundred eighty (180) days of a Change of Control, Mr. Ferrara will receive payment of the amounts described in the preceding paragraph and shall be entitled to receive as severance following the date of termination, (i) six (6) months of his Base Salary (as of the effective date of such termination), payable in monthly installments, (ii) six (6) monthly payments of the amount that the Company would have paid in continuation of Mr. Ferrara's medical coverage if he had remained an employee of the Company, and (iii) if the termination is effective prior to the end of a calendar year, a pro-rated portion of the bonus that would have been paid to Mr. Ferrara under the Ferrara Agreement if he had remained employed until the end of such calendar year. The foregoing severance will be contingent on the execution by Mr. Ferrara of a general release of any claims that he may have against the Company. After termination of the Employment Period, all of Mr. Ferrara's rights to employee benefits will cease as of the date of termination.

Brian E. LeClair

As of June 4, 2008, Mr. LeClair and the Company executed a letter agreement (the "Letter"). Under the terms of the Letter, Mr. LeClair will receive a base salary of \$190,000 per year (the "Base Salary"). The Base Salary is eligible for annual review and adjustment based on comparable market data and company and individual performance ("KRA's").

Mr. LeClair is eligible for a variable bonus of potentially 25% of his base salary on an annualized basis, based upon achieving specific goals for the applicable twelve month period. The variable bonus will be 70% based on company performance EBITDA-2008 (-500k) and 30% based upon the achievement of personal KRA's to be established by July 1, 2008.

Under the Letter, the Company granted Mr. LeClair an option to purchase 80,000 shares of the Company's common stock. This grant, which will vest at the rate of twenty five percent (25%) per year, was granted pursuant to, and subject to the terms and conditions of, the Company's 2006 Stock Plan. Additional yearly options can be granted to Mr. LeClair by the Company's Compensation Committee.

Mr. LeClair will be eligible to participate in the Company's employee benefit plans as they may exist from time to time, including health insurance (including medical, dental and vision), long term disability, term life insurance, and a 401(k) plan. Mr. LeClair will accrue three weeks of vacation during each of the first five years of his employment with the Company.

If Mr. LeClair is terminated by the Company without cause, he will receive a severance package which will include payment of his Base Salary for a minimum of ninety (90) days following such termination. Mr. LeClair will also be entitled to the benefits he is receiving at the time of his termination during such ninety (90) day severance period. Pursuant to the Letter, the final severance term for a termination without cause was to be reviewed by the Company's Board of Directors and Chief Executive Officer on or before December 31, 2008. However, as referenced above, in no event would the severance term following a termination without cause be less than ninety (90) days. Mr. LeClair will be entitled to a severance package which will include payment of his Base Salary for one hundred eighty (180) days following termination upon a change in control of the Company. Any severance package is subject to Mr. LeClair signing a release statement that will include non-disclosure, non-disparagement and non-compete clauses.

Mr. LeClair resigned from his positions with the Company on March 30, 2009.



## Grants of Plan-Based Awards

During the fiscal year ended December 31, 2008, no stock, equity incentive plan or non-equity incentive plan awards were granted to our named executive officers. The option awards granted to certain of our named executive officers during the fiscal year ended December 31, 2008 are set forth below.

**GRANTS OF PLAN-BASED AWARDS  
FOR THE YEAR ENDED DECEMBER 31, 2008**

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards			All other Stock Awards: # of shares of Stock or units (#)	All other Option Awards: # of Underlying Options (#)	Exercise or Base Price of Option Awards (\$/Sh)	Grant Date Fair Value of Stock and Option Awards(1) (\$)
		Threshold (\$)	Target (\$)	Maximum (\$)	Threshold (#)	Target (#)	Maximum (#)				
Michael C. Ferrara	N/A	0	0	0	0	0	0	0	0	N/A	0
Brian E. LeClair	6/17/2008	0	0	0	0	0	0	0	80,000	1.12	68,800
William J. Conroy	3/18/2008	0	0	0	0	0	0	0	20,000	1.10	17,000
	6/17/2008	0	0	0	0	0	0	0	50,000	1.12	43,000
Dennis P. Riordan	N/A	0	0	0	0	0	0	0	0	N/A	0
Jack M. Swig	N/A	0	0	0	0	0	0	0	0	N/A	0
Robert P. Bruno	N/A	0	0	0	0	0	0	0	0	N/A	0

(1) Represents the grant date fair value of each option award computed in accordance with SFAS No. 123R (grant date fair value of \$0.85 per share with respect to options granted to Mr. Conroy on 3/18/2008 and \$0.86 per share with respect to options granted to Messrs. LeClair and Conroy on 6/17/2008).

## Discussion of Summary Compensation and Grants of Plan-Based Awards Tables

Our executive compensation policies and practices, pursuant to which the compensation set forth in the Summary Compensation Table and the Grants of Plan-Based Awards Table was paid or awarded, are described above under "Compensation Discussion and Analysis." In 2006, we implemented a bonus pool for our named executive officers.

The terms of our 2006 bonus pool are described above under "Compensation Discussion and Analysis—Current Material Elements—Discretionary Bonuses." The bonuses paid in connection with this bonus pool are reported as "Non-Equity Incentive Plan Compensation" for 2006 in the Summary Compensation Table. While the Company also established a 2007 bonus pool, the thresholds were not met and no bonuses were paid from the pool. The Company did not establish a bonus pool or other discretionary bonus plan for 2008. Grants of options to named executive officers are 25% exercisable on each of the first four anniversaries of the date of grant. Further, grants of options to named executive officers expire ten years from the date of grant.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information with respect to our named executive officers concerning unexercised stock option awards and unvested stock awards as of December 31, 2008.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END  
AS OF DECEMBER 31, 2008

Name	OPTION AWARDS					STOCK AWARDS			
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock that have not Vested (#)	Market Value of Shares or Units of Stock that have not Vested (\$)	Equity Incentive Plan Awards: Number of Unearned Shares, Units, or Rights that have not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units, or Rights that have not Vested (\$)
Michael C. Ferrara(1)	75,000 75,000	225,000(2) 225,000	0	1.05	11/14/2017	0	0	0	0
Brian E. LeClair(1)	0 0	80,000(3) 80,000	0	1.12	6/17/2018	0	0	0	0
William J. Conroy(1)	0 0	20,000(4) 50,000(5) 70,000	0	1.10 1.12	3/18/2018 6/17/2018	0	0	0	0
Dennis P. Riordan(1)	25,000 10,000 25,000 15,000 15,000 10,000	0 0 0 0 0 0	0 0 0 0 0 0	0.31 0.69 0.51 0.41 2.25 3.70	1/3/2010 1/2/2011 1/2/2012 1/2/2013 1/2/2014 1/2/2015	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0

8,000	0	0	1.34	12/6/2015	0	0	0	0
2,500	7,500(6)	0	1.55	1/3/2017	0	0	0	0
110,500	7,500							

- 
- (1) Generally, all unexercisable options for our named executive officers vest over a four year period in equal annual installments, with the first 25% vesting one year after date of grant.
- (2) The option was granted on November 14, 2007 and 75,000 shares became exercisable on November 14, 2008. Assuming continued employment with the Company, 75,000 shares become exercisable on November 14 of each of 2009, 2010 and 2011.
- (3) The option was granted on June 17, 2008. As a result of Mr. LeClair's resignation from his positions with the Company on March 30, 2009, all of the underlying shares of this grant automatically reverted back to the 2006 Plan on that date.
- (4) The option was granted on March 18, 2008 and assuming continued employment with the Company, 5,000 shares become exercisable on March 18 of each of 2009, 2010, 2011 and 2012.
- (5) The option was granted on June 17, 2008 and assuming continued employment with the Company, 12,500 shares become exercisable on June 17 of each of 2009, 2010, 2011 and 2012.
- (6) The option was granted on January 3, 2007 (the "Option"). As of December 31, 2008, 25% of the Option vested. Mr. Riordan resigned from his positions with the Company on January 31, 2009 (the "Resignation Date"). As of the Resignation Date, 50% of the Option vested (such amount, the "Vested Options"). Pursuant to the terms of the 2006 Plan, on April 30, 2009, the Vested Options, if they remain unexercised, will expire and the shares covering such Vested Options will revert back to the 2006 Plan. The shares covering the unvested options at the Resignation Date automatically reverted back to the 2006 Plan at that date.

## Options Exercises and Stock Vested

The following table sets forth information with respect to our named executive officers concerning the exercise of stock options during the fiscal year ended December 31, 2008.

**OPTION EXERCISES AND STOCK VESTED  
FOR THE YEAR ENDED DECEMBER 31, 2008**

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)
Michael C. Ferrara	0	0	0	0
Brian E. LeClair	0	0	0	0
William J. Conroy	0	0	0	0
Dennis P. Riordan	0	0	0	0
Jack M. Swig	43,391	22,950	0	0
Robert P. Bruno	0	0	0	0

## Pension Benefits

As of December 31, 2008, we had no pension benefits plans in effect.

**PENSION BENEFITS  
FOR THE YEAR ENDED DECEMBER 31, 2008**

Name	Plan Name	Number of Years Credited Service (#)	Present Value of Accumulated Benefit (\$)	Payments During Last Fiscal Year (\$)
Michael C. Ferrara	N/A	N/A	N/A	N/A
Brian E. LeClair	N/A	N/A	N/A	N/A
William J. Conroy	N/A	N/A	N/A	N/A
Dennis P. Riordan	N/A	N/A	N/A	N/A
Jack M. Swig	N/A	N/A	N/A	N/A
Robert P. Bruno	N/A	N/A	N/A	N/A

## Nonqualified Deferred Compensation

As of December 31, 2008, we had no deferred compensation plans in effect.

NON QUALIFIED DEFERRED COMPENSATION  
FOR THE YEAR ENDED DECEMBER 31, 2008

Name	Executive Contributions in Last FY (\$)	Registrant Contributions in Last FY (\$)	Aggregate Earnings in Last FY (\$)	Aggregate Withdrawals/ Distributions (\$)	Aggregate Balance at Last FYE (\$)
Michael C. Ferrara	N/A	N/A	N/A	N/A	N/A
Brian E. LeClair	N/A	N/A	N/A	N/A	N/A
William J. Conroy	N/A	N/A	N/A	N/A	N/A
Dennis P. Riordan.	N/A	N/A	N/A	N/A	N/A

## Director Compensation

The table below summarizes the compensation paid to our non-employee Directors for the fiscal year ended December 31, 2008. Directors who are employees receive no additional compensation for Board service.

DIRECTOR COMPENSATION  
FOR THE YEAR ENDED DECEMBER 31, 2008

Name of Director	Fees Earned or Paid in Cash(1) (\$)	Stock Awards(3) (\$)	Option Awards(2) (\$)	Non-Equity Incentive Plan Compensation (\$)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
James N. Little	22,000	0	1,275	0	0	0	23,275
Eric G. Walters	24,000	0	1,275	0	0	0	25,275
George Uveges	22,000	0	1,275	0	0	0	23,275
Leo Pierre Roy	22,000	0	1,275	0	0	0	23,275

Note 1—Each Director received a fee of \$4,500 per quarter for serving on the Board. In addition, a director received additional compensation if he was the chairperson of a Board committee.



Note 2—The option awards reflect the dollar amount recognized for financial statement reporting purposes in accordance with SFAS No. 123R with respect to stock option grants in 2008. The assumptions used in the calculation of these amounts are included in Note 1 to the Company's audited consolidated financial statements for the year ended December 31, 2008 included in the Company's Annual Report on Form 10-K. The grant date fair value of all options granted in 2008 for all Directors computed in accordance with SFAS No. 123R was \$0.85 per share.

Note 3—Mr. Little had 0 stock awards and 36,000 option awards outstanding as of December 31, 2008.

Note 3—Mr. Roy had 0 stock awards and 36,000 option awards outstanding as of December 31, 2008.

Note 3—Mr. Uveges had 0 stock awards and 46,000 option awards outstanding as of December 31, 2008.

Note 3—Mr. Walters had 0 stock awards and 46,000 option awards outstanding as of December 31, 2008.

Non-employee directors are granted an option to purchase 25,000 shares upon joining the Board of Directors and 7,500 shares on the first business day after January 1 of each calendar year if the non-employee director remains a director through that date. The option grants are exercisable on the following terms, assuming continued membership on the Board of Directors: 25% exercisable six months and one day after the date of grant and the remaining 75% exercisable in three (3) equal annual installments on each of the first three anniversaries of the date of grant. All options were granted automatically pursuant to the terms of our 2006 Stock Plan and expire five (5) years from the date of grant.

## Performance Graph

## COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\*

Among Microfluidics International Corporation, The AMEX Composite Index  
And A Peer Group

	Cumulative Total Returns as of December 31					
	12/03	12/04	12/05	12/06	12/07	12/08
MICROFLUIDICS INTERNATIONAL CORPORATION	100.00	173.33	60.00	68.44	51.56	16.00
AMEX Composite	100.00	124.13	155.00	184.30	271.52	132.72
Peer Group	100.00	156.07	182.05	163.19	135.83	20.57

Our competitors are either larger integrated companies or privately-held companies. We have chosen a peer group consisting of companies with a market capitalization from \$7 million to \$24 million in the information technology sector of the American Stock Exchange. The peer group consists of the following issuers:

- Advance Photonic Inc.
- Elecsys Corporation
- Elixir Gaming Technologies Inc.
- Globalscape Inc.
- Orsus Xelent Technologies Inc.
- Relm Wireless Corporation
- Softbrands Inc.
- Telkonet Inc.
- Tucows Inc.
- Widepoint Corporation
- Wireless Telecom Group Inc.

## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

## Beneficial Ownership of Directors and Executive Officers and Principal Holders of Voting Securities

Our Common Stock is the only class of securities entitled to vote at the Meeting. As of March 25, 2009, 10,371,782 shares of Common Stock were issued and outstanding and entitled to vote at the Meeting. Each share of Common Stock is entitled to one vote. The following table sets forth information regarding ownership of our Common Stock as of March 25, 2009 for (i) each of our named executive officers and directors, (ii) holders of more than 5% of our Common Stock, and (iii) all of our named executive officers and directors as of March 25, 2009 as a whole. For named executive officers and directors, this table also includes the position held by each such person.

	Positions and Offices with the Company, if any(1)	Amount and Nature of Beneficial Ownership(2)	Percent of Class(3)
Michael C. Ferrara	Chief Executive Officer and Director	95,000(4)	*
Brian E. LeClair	Former Chief Financial Officer, Executive Vice President and Treasurer	0	*
William J. Conroy	Vice President – Operations and Engineering	5,000(5)	*
Robert P. Bruno	Former President, Chief Operating Officer	101,300(6)	*
Jack M. Swig	Former Vice President – Corporate Development, Investor Relations Manager, General Counsel and Secretary	70,931(7)	*
Dennis P. Riordan	Former Controller and Treasurer	17,127(8)	*
James N. Little	Chairman of the Board	56,375(9)	*
Eric G. Walters	Director	51,250(10)	*
George Uveges	Director	62,250(11)	*
Leo Pierre Roy	Director	71,486(12)	*
Irwin J. Gruverman 60 Seminary Drive Newton, MA 02466		1,697,805(13)	16.4%
Joseph P. Daly 497 Circle Freeway Cincinnati, OH 45246		831,100(14)	8.0%
All current directors and named executive officers as a group (7 persons)		341,361(15)	3.3%
Global Strategic Partners, LLC c/o Corporation Service Company		11,755,391(16)	*

2711 Centerville Road,  
Suite 400  
Wilmington, DE 19808

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Less than 1%

(1) All addresses are c/o Microfluidics International Corporation, 30 Ossipee Road, Newton, MA 02464, unless otherwise indicated.

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- (2) Unless otherwise indicated, each person possesses sole voting and investment power with respect to the shares.
- (3) Shares of Common Stock that a person has the right to acquire within 60 days of March 25, 2009, according to Registrar & Transfer Company, our transfer agent, pursuant to the exercise of options are deemed to be outstanding for the purpose of computing the percentage ownership of such person or entity, but are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person or entity shown in the table. The inclusion herein of any shares of Common Stock deemed beneficially owned does not constitute an admission of beneficial ownership of those shares. Percentage ownership is based on 10,371,782 shares of Common Stock issued and outstanding on March 25, 2009.
- (4) Consists of 20,000 shares of Common Stock and 75,000 shares of Common Stock subject to currently exercisable options.
- (5) Consists of 0 shares of Common Stock and 5,000 shares of Common Stock subject to currently exercisable options.
- (6) Consists of 101,300 shares of Common Stock and 0 shares of common stock subject to currently exercisable options.
- (7) Consists of 70,931 shares of Common Stock and 0 shares of Common Stock subject to currently exercisable options.
- (8) Consists of 17,127 shares of Common Stock and 0 shares of Common Stock subject to currently exercisable options.
- (9) Consists of 35,000 shares of Common Stock and 21,375 shares of common stock subject to currently exercisable options.
- (10) Consists of 19,000 shares of Common Stock and 32,250 shares of Common Stock subject to currently exercisable options.
- (11) Consists of 30,000 shares of Common Stock and 32,250 shares of Common Stock subject to currently exercisable options.
- (12) Consists of 50,111 shares of Common Stock and 21,375 shares of Common Stock subject to currently exercisable options.
- (13) Information with respect to beneficial ownership is based upon information furnished by Irwin J. Gruverman in Schedule 13-D/A filed with the Securities and Exchange Commission on February 15, 2008.
- (14) Information with respect to beneficial ownership is based upon information furnished by Joseph P. Daly in Schedule 13-D/A filed with the Securities and Exchange Commission on February 5, 2009.
- (15) Includes 187,250 shares of Common Stock subject to currently exercisable options. See footnotes 4 through 12 above.
- (16) Information with respect to beneficial ownership is based upon information furnished by Global Strategic Partners, LLC ("GSP") in a Schedule 13D filed with the Securities and Exchange Commission on November 24, 2008 (the "Schedule"). GSP incorrectly reported on the Schedule that it beneficially owned 19,755,391 shares of

our common stock. GSP made such incorrect report because we incorrectly reported in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2008 that, as of November 18, 2008, we had 18,345,532 shares of common stock outstanding. As corrected in a Form 10-Q/A for the same quarter that we filed with the Securities and Exchange Commission on November 20, 2008, the correct number of our shares of common stock outstanding as of November 18, 2008 was 10,345,532. As of March 31, 2009, GSP has not amended the Schedule to reflect this correction.

Authorization or Issuance of Securities Otherwise than for Exchange.

The Company seeks, as further described below in Proposal 2, to increase the number of shares of common stock authorized for issuance under its Certificate of Incorporation, as amended, from 20,000,000 to 30,000,000 (such additional shares, the “New Shares”). A description of the Company’s common stock can be found on the Company’s registration statement on Form 8-A (File No. 0-11625) filed with the SEC under Section 12 of the Securities Exchange Act of 1934, including any amendment or report filed for the purpose of updating such description, and is incorporated herein by reference. As further detailed in Proposal 2 below, the Company seeks authorization of the New Shares so that to comply with its obligations under a convertible debenture (the “Debenture”) and a warrant (the “Warrant”) that it sold to Global Strategic Partners, LLC, a Delaware limited liability company, pursuant to a Debenture and Warrant Purchase Agreement (the “Agreement” and together with the Warrant and Debenture, the “Transaction Documents”) dated November 14, 2008. A detailed description of the Transaction Documents, including the nature and amount of consideration we have received and could potentially receive in the future under the Transaction Documents, can be found in the Form 8-K filed by the Company with the Securities and Exchange Commission on November 20, 2008, and is incorporated by reference herein.

The approval of an amendment authorizing additional common shares will not cause any change or dilution to the rights of existing holders of common stock of the Company, unless and until such time as any common shares are actually issued by the Board of Directors.

The information required by Item 13(a) of Schedule 14A is included in Items 7, 7A, 8 and 9 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2008 filed with the Securities and Exchange Commission on March 30, 2009, and is incorporated by reference herein.

It is expected that a member of the firm of UHY LLP will be present at the Annual Meeting. The representative will be given the opportunity to make a statement if he or she desires to do so and will be available to respond to appropriate questions.

PROPOSAL 2

APPROVAL OF AN AMENDMENT TO THE COMPANY'S CERTIFICATE OF INCORPORATION, AS AMENDED, TO INCREASE THE AUTHORIZED SHARES OF COMMON STOCK.

Under our existing Certificate of Incorporation we are authorized to issue 20,000,000 shares of common stock. As of March 25, 2009, 10,371,782 shares of common stock were issued and outstanding. An additional 1,000,000 shares of common stock are reserved for issuance pursuant to issued and outstanding stock options and 801,347 shares are reserved for future issuance pursuant to the 2006 Plan. The remaining shares are reserved for issuance in satisfaction of the Transaction Documents. The Board of Directors is requesting the shareholders to approve an amendment to our Certificate of Incorporation increasing the number of authorized shares of common stock from 20,000,000 to 30,000,000. The text of the proposed amendment is set forth in Appendix A to this Proxy Statement.

Under the terms of the Transaction Documents, we are required to amend our Certificate of Incorporation to increase our authorized shares of common stock by at least that number of shares as is necessary, when aggregated with the shares previously authorized and available for issuance under the amended Certificate of Incorporation, to permit us to fulfill our obligations under the Transaction Documents. Failure to increase the number of authorized shares as required would be an event of default under the terms of the Transaction Documents. The Board of Directors has determined that an increase of 4,000,000 shares of common stock is in our best interest and the best interest of our shareholders and will permit us to fulfill our obligations under the Transaction Documents.

The Board of Directors believes that the additional increase of 6,000,000 authorized common shares is advisable and in the best interests of the Company and its shareholders for several reasons. This increase will permit the Board of Directors to issue stock without further costs or delays in obtaining shareholder approval and, thereby, provide us with maximum flexibility in structuring acquisitions, joint ventures, strategic alliances, capital-raising transactions and for other corporate purposes. Approval of this proposal would enable us to respond promptly to and take advantage of market conditions and other favorable opportunities without incurring the delay and expense associated with calling a special shareholders' meeting to approve a contemplated stock issuance. Although we presently contemplate no particular transaction involving the issuance of common stock, our management and Board of Directors believes it is in our best interests and the shareholders to be prepared to issue common stock without the necessity of another shareholders' meeting should additional common stock be a component of any future raising of capital.

The directors have decided that, under applicable law, an affirmative vote of a majority of the shares present, in person or represented by proxy, at the Meeting and entitled to vote be required to approve such amendment.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR THE PROPOSED AMENDMENT TO THE COMPANY'S CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK FROM 20,000,000 TO 30,000,000 AND PROXIES SOLICITED BY THE BOARD OF DIRECTORS WILL BE VOTED IN FAVOR OF SUCH AMENDMENT UNLESS A STOCKHOLDER HAS OTHERWISE INDICATED ON THE PROXY CARD.



PROPOSAL 3

RATIFICATION OF THE BOARD OF DIRECTORS' APPOINTMENT OF AUDITORS

The Board of Directors has approved the appointment by the Audit Committee of the firm of UHY LLP, independent auditors, to serve as auditors for the fiscal year ending December 31, 2009. UHY LLP served as the Company's independent auditors in 2008. The Board of Directors recommends that the stockholders approve this appointment, although such ratification is not required under Delaware law, or the Company's Certificate of Incorporation or By-Laws. The directors have decided that an affirmative vote of a majority of the shares present, in person or represented by proxy, at the Meeting and entitled to vote be required to ratify such appointment. It is expected that a member of the firm of UHY LLP will be present at the Meeting. The representative will be given the opportunity to make a statement if he or she desires to do so and will be available to respond to appropriate questions.

The firm of UHY LLP ("UHY") acts as our principal independent registered public accounting firm. Through and as of March 30, 2009, UHY had a continuing relationship with UHY Advisors, Inc. ("Advisors") through which UHY's partners provide non-audit services. UHY has only a few full-time employees. Therefore, few, if any, of the audit services performed were provided by permanent full-time employees of UHY. UHY manages and supervises the audit services and audit staff, and is exclusively responsible for the opinion rendered in connection with its examination.

In the event that ratification of the Board of Directors' appointment of UHY LLP is not obtained at the Meeting, the Board of Directors will reconsider their appointment.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR THE RATIFICATION OF THE APPOINTMENT OF UHY LLP AS THE COMPANY'S AUDITORS, AND PROXIES SOLICITED BY THE BOARD OF DIRECTORS WILL BE VOTED IN FAVOR OF SUCH RATIFICATION UNLESS A STOCKHOLDER HAS OTHERWISE INDICATED ON THE PROXY CARD.

INDEPENDENT ACCOUNTANT FEES FOR FISCAL YEARS 2008 AND 2007

Audit Fees

During the fiscal years ended December 31, 2008 and December 31, 2007, UHY LLP ("UHY"), was paid approximately \$110,000 and \$101,000, respectively, for the audit of the Company's financial statements and review of financial statements included in the Company's reports on Form 10-Q or services that are normally provided by UHY in connection with statutory and regulatory filings or engagements for those fiscal years. All services were approved by the Audit Committee.

Audit-Related Fees

During the fiscal years ended December 31, 2008 and December 31, 2007, UHY was paid approximately \$24,000 and \$26,000, respectively, for assurance and related services that are reasonably related to the performance of audit or review of our financial statements and are not reported under "Audit Fees" above. All services were approved by the Audit Committee.

Tax Fees

During the fiscal years ended December 31, 2008 and December 31, 2007, UHY was paid approximately \$26,000 and \$11,000, respectively, for tax compliance, tax advice and tax planning services. All services were approved by the Audit Committee.



#### All Other Fees

During the fiscal years ended December 31, 2008 and 2007, UHY received no payments for non-audit services.

For each fiscal year, the Audit Committee reviews the proposed audit and audit-related services as well as proposed permissible non-audit services to be provided by the Company's independent public accountants and approves those services it believes to be necessary and advisable. During the year, situations may arise in which the Company desires to engage the independent public accountants to perform services that were not foreseeable at the time of the initial approval. The Audit Committee pre-approves any such additional services as required by the Securities and Exchange Commission. The Audit Committee may delegate authority to one or more of its members to pre-approve any audit or non-audit service, provided that any pre-approval decisions are reported to the Audit Committee at its next regularly scheduled meeting.

The Audit Committee has considered whether the provision of non-core audit services to the Company by the Company's principal auditor is compatible with maintaining independence and has affirmed in each instance that the provision of such services was compatible with the principal auditor's independent role.

#### AUDIT COMMITTEE REPORT

The information in this Audit Committee Report is not deemed "soliciting material" or to be "filed" with the Securities and Exchange Commission unless the Company specifically requests that it be treated as soliciting material or specifically incorporates it by reference into a document filed with the Securities and Exchange Commission.

The Audit Committee oversees the accounting, financial reporting and tax functions of the Company, including matters relating to the internal control over financial reporting and the appointment and activities of the Company's independent accountants. The Audit Committee has final authority to select, retain and compensate the Company's independent auditors.

The Audit Committee operates under a written charter adopted by the Company's Board of Directors. The Audit Committee and the Board review annually the written charter. A copy of the Audit Committee's charter is available on the Company's website at [http://www.mficcorp.com/index.php?option=com\\_content&task=view&id=44&Itemid=42](http://www.mficcorp.com/index.php?option=com_content&task=view&id=44&Itemid=42).

The Audit Committee charter was last modified on January 16, 2003 and was attached as an appendix to the Company's proxy statement in 2005.

In accordance with law, the Audit Committee pre-approves all services provided by UHY LLP ("UHY"), the Company's independent auditors.

1. The Audit Committee has reviewed and discussed the audited financial statements with management.
2. The Audit Committee has discussed with the Company's independent auditors, UHY, the matters required to be discussed by SAS 61 (Codification of Statements on Auditing Standards, AU Sec. 380), as may be modified or supplemented.
3. The Audit Committee has received the written disclosures and the letter from the independent auditors required by Independence Standards Board Standard No. 1 (Independence Standards Board Standard No. 1, Independence Discussions with Audit Committees), as may be modified or supplemented, and has discussed with the independent auditors the independent auditors' independence; and

4. Based on the review in paragraphs 1-3, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008, which the Company filed with the Securities and Exchange Commission on March 30, 2009.

Audit Committee:  
Eric G. Walters (Chairperson)  
James N. Little  
Leo Pierre Roy  
George Uveges

### WHERE YOU CAN FIND MORE INFORMATION

The Company files annual, quarterly and current reports, proxy and information statements and other information with the SEC under the Exchange Act. You may read and copy this information at the Public Reference Room located at 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 1-800-732-0330. You may also obtain copies of the materials described above at prescribed rates by writing to the SEC, Public Reference Section, 100 F Street, N.E., Washington, D.C. 20549.

The Company files its reports, proxy statements and other information electronically with the SEC. You may access information on the Company at the SEC web site containing reports, proxy and information statements and other information regarding issuers that file electronically with the SEC at <http://www.sec.gov>.

The SEC also permits us to “incorporate by reference” into this Proxy Statement important business and financial information about the Company that is not included in or delivered with this Proxy Statement. The following documents filed with the SEC by the Company are incorporated by reference into this Proxy Statement (excluding portions thereof that are deemed furnished and not filed):

- (1) the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2007, filed on March 21, 2008;
- (2) the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2008, filed on March 30, 2009;
- (3) the Company’s Schedule 14A filed on April 29, 2008;
- (4) the Company’s Current Report on Form 8-K filed on November 20, 2008; and
- (5) Company’s registration statement on Form 8-A (File No. 0-11625) filed with the SEC under Section 12 of the Securities Exchange Act of 1934, including any amendment or report filed for the purpose of updating such description.

You may obtain copies of any of the documents incorporated by reference through the Company or the SEC, as described above. Documents incorporated by reference are available from us without charge, excluding all exhibits unless we have specifically incorporated by reference an exhibit in the document. Shareholders may obtain documents incorporated by reference in this document by requesting them in writing or by telephone from the Company at the following address:

Microfluidics International Corporation  
30 Ossipee Road  
Newton, MA 02464  
Attn: Peter Byczko  
(617) 949-5452

You should rely only on the information contained or incorporated by reference in this Proxy Statement. We have not authorized anyone to provide you with information that is different from what is contained in this Proxy Statement, including the documents incorporated herein by reference.

This Proxy Statement is dated April 28, 2009. There may be changes in the affairs of the Company after the date of this Proxy Statement, which are not reflected in this document. We have not authorized anyone to give any information or make any representation about the matters addressed in this Proxy Statement that differs from, or adds to, the information in this document or in the Company’s documents that are publicly filed with the SEC. Therefore, if anyone does give you different or additional information, you should not rely on it.

VOTING PROCEDURES

The presence, in person or by proxy, of at least a majority of the outstanding shares of Common Stock entitled to vote at the Meeting is necessary to establish a quorum for the transaction of business. Shares represented by proxies pursuant to which votes have been withheld from any nominee for director, or which contain one or more abstentions or broker “non-votes,” are counted as present for purposes of determining the presence or absence of a quorum for the Meeting. A “non-vote” occurs when a broker or other nominee holding shares for a beneficial owner votes on one proposal, but does not vote on another proposal because the broker does not have discretionary voting power and has not received instructions from the beneficial owner.

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For all matters being submitted to stockholders at the Meeting, the affirmative vote of a majority of shares present, in person or represented by proxy, and entitled to vote on that matter, is required for approval. Shares voted to abstain, since they are not affirmative votes for the matter, will have the same effect as votes against the matter, while broker "non-votes," since they are not entitled to vote for the matter, have no effect on the vote.

#### OTHER BUSINESS

The Board of Directors knows of no business that will be presented for consideration at the Meeting other than that stated above. If any other business should come before the Meeting, votes may be cast pursuant to proxies in respect to any such business in the best judgment of the person or persons acting under the proxies.

#### STOCKHOLDER PROPOSALS

Under Rule 14a-8 promulgated under the Securities and Exchange Act of 1934, stockholders of the Company may present proper proposals for inclusion in the Company's proxy statement and for consideration at the next annual meeting of stockholders by submitting their proposals to the Company in a timely manner. In order to be considered for inclusion in the proxy statement distributed to stockholders prior to the annual meeting in the year 2010, a stockholder proposal must be received by the Company no later than December 25, 2009 and must otherwise comply with the requirements of Rule 14a-8. In order to be considered for presentation at the annual meeting of stockholders in the year 2010, although not included in the proxy statement, a stockholder proposal must comply with the requirements of the Company's by-laws and be received by the Company no later than April 25, 2010. Stockholder proposals should be delivered in writing to Peter Byczko, Vice President of Finance, Microfluidics International Corporation, P.O. Box 9101, 30 Ossipee Road, Newton, Massachusetts 02464.

#### EXPENSES AND SOLICITATION

The cost of solicitation of proxies will be borne by the Company. Proxies will be solicited principally through the mail. Directors, officers and regular employees of the Company may make further solicitation of proxies from some stockholders personally, by telephone, internet or special letter. No additional compensation, except for reimbursement of reasonable out-of-pocket expenses, will be paid for any such further solicitation. In addition, the Company may request banks, brokers, and other custodians, nominees and fiduciaries to solicit customers of theirs who have shares of the Company registered in the name of the nominee. The Company will reimburse any such persons for their reasonable out-of-pocket expenses. The Company may engage a proxy solicitor to which it would pay customary fees and expenses.

APPENDIX A

Article Fourth of the Company's Certificate of Incorporation, as amended, is hereby amended to increase the number of authorized shares of common stock to 30,000,000 shares by replacing Article Fourth in its entirety with the following:

"FOURTH. The total number of shares of stock which the Corporation shall have authority to issue is 30,000,000 shares of Common Stock with a par value of \$0.01 per share."

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Microfluidics International  
30 Ossipee Rd - P.O. BOX 9101  
Newton, MA 02464

**VOTE BY  
INTERNET**—[www.proxyvote.com](http://www.proxyvote.com)  
Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

**Electronic Delivery of Future  
PROXY MATERIALS**  
If you would like to reduce the costs incurred by our company in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access stockholder communications electronically in future years.

**VOTE BY PHONE 1-800-690-6903**  
Use any touch-tone telephone to transmit your voting instructions up until 11:59 P.M. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you call and then follow the instructions.

**VOTE BY MAIL**  
Mark, sign and date your proxy card and return it in the postage-paid envelope we've provided or return to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

**TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:**

DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

The Board of Directors recommends that you vote FOR the following:

For All	Withhold All	For All Except	
o	o	o	

To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below.

1. Election of Directors

Nominees

- 01) Michael C. Ferrara
- 02) James N. Little
- 03) Leo Pierre Roy
- 04) George Uveges
- 05) Eric G. Walters

The Board of Directors recommends you vote FOR the following proposal(s):

- |  |   |          |   |         |         |
|--|---|----------|---|---------|---------|
| 2. Proposal to amend the Company's Certificate of Incorporation to increase the number of authorized shares of common stock to 30,000,000 from 20,000,000. | o | For<br>o | o | Against | Abstain |
| 3. Proposal to ratify the Board of Directors' appointment of UHY LLP as the Company's independent auditors for the fiscal year ending December 31, 2009.   | o | For<br>o | o | Against | Abstain |

Note: Such other business as may properly come before the meeting or any adjournment thereof.

Signature (PLEASE SIGN WITHIN BOX) Date: Signature (Joint Owners)



MICROFLUIDICS INTERNATIONAL CORPORATION

This proxy is solicited by the Board of Directors  
Annual meeting of Shareholders  
June 4, 2009 09:00 AM

The shareholder(s) hereby appoint(s) Peter Byczko, Vice President & Chief Accounting Officer and Phyllis A. Craine, Paralegal, or either of them, as proxies, each with the power to appoint his or her substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common Stock of MICROFLUIDICS INTERNATIONAL CORPORATION that the shareholder(s) is/are entitled to vote at the Annual Meeting of shareholder(s) to be held at 09:00AM, EST on June 4, 2009, at the offices of the Company at 30 Ossipee Road, Newton, MA 02464-9101, and any adjournment or postponement thereof.

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