

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- 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 Pursuant to § 240.14a-12

MELA Sciences, Inc.

(Name of Registrant as Specified In Its Charter)

Payment of Filing Fee (Check the appropriate box)

No fee required.

Fee computed on table below per Exchange Act Rules 14a-6(i) (1) and 0-11.

(1) Title of each class of securities to which transaction applies:

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(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):

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(5) Total fee paid:

Fee paid previously with preliminary materials.

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:

MELA SCIENCES, INC.

50 South Buckhout Street, Suite 1

Irvington, New York 10533

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held on April 29, 2011

Dear Stockholder:

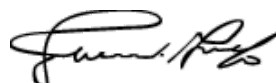
You are cordially invited to attend the Annual Meeting of Stockholders of MELA Sciences, Inc., a Delaware corporation (the "Company"). The meeting will be held at The Courtyard By Marriott Hotel, 475 White Plains Road, Tarrytown, NY 10591 on Friday, April 29, 2011 at 9:00 a.m. local time, for the following purposes:

1. To elect seven directors to serve for the ensuing year and until their successors are elected.
2. To ratify the selection by the audit committee of the Board of Directors of EisnerAmper LLP as MELA Sciences' independent registered public accounting firm for the fiscal year ending December 31, 2011.
3. To consider and cast an advisory vote on a non-binding resolution to approve the compensation of our executives disclosed in this Proxy Statement.
4. To consider and cast an advisory vote upon a non-binding resolution to determine the frequency of an advisory vote on executive compensation.
5. To conduct any other business properly brought before the meeting.

These items of business are more fully described in the Proxy Statement accompanying this Notice.

The record date for the Annual Meeting is March 9, 2011. Only stockholders of record at the close of business on that date may vote at the meeting or any adjournment thereof.

By Order of the Board of Directors



Joseph V. Gulfo, M.D.
President and Chief Executive Officer
Irvington, New York

March 24, 2011

YOUR VOTE IS IMPORTANT

THIS PROXY STATEMENT IS FURNISHED IN CONNECTION WITH THE SOLICITATION OF PROXIES BY THE COMPANY, ON BEHALF OF THE BOARD OF DIRECTORS, FOR THE 2011 ANNUAL MEETING OF STOCKHOLDERS. THE PROXY STATEMENT AND THE RELATED PROXY FORM ARE BEING DISTRIBUTED ON OR ABOUT MARCH 24, 2011. YOU CAN VOTE YOUR SHARES USING ONE OF THE FOLLOWING METHODS:

- **COMPLETE AND RETURN A WRITTEN PROXY CARD;**
- **BY INTERNET OR TELEPHONE; OR**
- **ATTEND THE COMPANY'S 2011 ANNUAL MEETING OF STOCKHOLDERS AND VOTE.**

ALL STOCKHOLDERS ARE CORDIALLY INVITED TO ATTEND THE MEETING. HOWEVER, TO ENSURE YOUR REPRESENTATION AT THE MEETING, YOU ARE URGED TO MARK, SIGN, DATE AND RETURN THE ENCLOSED PROXY CARD AS PROMPTLY AS POSSIBLE IN THE POSTAGE-PREPAID ENVELOPE ENCLOSED FOR THAT PURPOSE OR VOTE YOUR SHARES BY INTERNET OR TELEPHONE. ANY STOCKHOLDER ATTENDING THE MEETING MAY VOTE IN PERSON EVEN IF HE OR SHE HAS RETURNED A PROXY CARD OR VOTED BY INTERNET OR TELEPHONE.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE STOCKHOLDERS MEETING TO BE HELD ON APRIL 29, 2011 — THE PROXY STATEMENT AND THE 2010 ANNUAL REPORT TO STOCKHOLDERS ARE AVAILABLE AT [HTTP://WWW.EDOCUMENTVIEW.COM/MELA](http://www.edocumentview.com/mela).

TABLE OF CONTENTS

	<u>Page</u>
<u>QUESTIONS AND ANSWERS ABOUT THIS PROXY MATERIAL AND VOTING</u>	1
<u>PROPOSAL I: ELECTION OF DIRECTORS</u>	5
<u>CORPORATE GOVERNANCE</u>	8
<u>PROPOSAL II: RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</u>	13
<u>PROPOSAL III: ADVISORY (NON-BINDING) VOTE APPROVING EXECUTIVE COMPENSATION</u>	14
<u>PROPOSAL IV: ADVISORY (NON-BINDING) VOTE DETERMINING THE FREQUENCY OF ADVISORY VOTE ON EXECUTIVE COMPENSATION</u>	15
<u>EQUITY COMPENSATION PLAN INFORMATION</u>	16
<u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</u>	16
<u>SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE</u>	17
<u>EXECUTIVE OFFICERS OF THE COMPANY</u>	17
<u>COMPENSATION DISCUSSION AND ANALYSIS</u>	18
<u>SUMMARY COMPENSATION TABLE</u>	20
<u>REPORT OF THE COMPENSATION COMMITTEE OF THE BOARD OF DIRECTORS ON EXECUTIVE COMPENSATION</u>	28
<u>CERTAIN TRANSACTIONS</u>	29
<u>HOUSEHOLDING OF PROXY MATERIALS</u>	30
<u>OTHER MATTERS</u>	30

MELA SCIENCES, INC.

50 South Buckhout Street, Suite 1
Irvington, New York 10533

**PROXY STATEMENT
FOR THE 2011 ANNUAL MEETING OF STOCKHOLDERS
APRIL 29, 2011**

QUESTIONS AND ANSWERS ABOUT THIS PROXY MATERIAL AND VOTING

Why am I receiving these materials?

We sent you this Proxy Statement and the enclosed proxy card because the Board of Directors of MELA Sciences, Inc. (which we will refer to as the “Company” throughout this Proxy Statement) is soliciting your proxy to vote at the Company’s 2011 Annual Meeting of Stockholders (the “Annual Meeting”). You are invited to attend the Annual Meeting, and we request that you vote on the proposals described in this Proxy Statement. You do not need to attend the meeting to vote your shares. Instead, you may simply complete, sign and return the enclosed proxy card, or you may grant a proxy to vote your shares by means of the telephone or on the Internet.

The Company intends to mail this Proxy Statement and the accompanying proxy card together with the Company’s 2010 Annual Report to Stockholders on or about March 24, 2011 to all stockholders of record entitled to vote at the Annual Meeting. Each share outstanding on the record date will be entitled to one vote.

Who can vote at the Annual Meeting?

Only stockholders of record at the close of business on March 9, 2011 will be entitled to vote at the Annual Meeting. On this record date, there were 25,262,538 shares of common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If on March 9, 2011, your shares were registered directly in your name with the Company’s transfer agent, American Stock Transfer and Trust Company, then you are a stockholder of record. As a stockholder of record, you may vote in person at the meeting or vote by proxy.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If on March 9, 2011, your shares were held not in your name, but rather, in an account at a brokerage firm, bank, dealer, or other similar organization, then you are the beneficial owner of shares held in “street name” and these proxy materials are being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the Annual Meeting. As a beneficial owner, you have the right to direct your broker or other agent on how to vote the shares in your account. You are also invited to attend the Annual Meeting. Since you are not the stockholder of record, however, you may not vote your shares in person at the meeting unless you request and obtain a valid proxy from your broker or other agent.

What am I voting on?

There are four matters scheduled for a vote:

- Election of seven directors;
 - Ratification of EisnerAmper LLP as the Company’s independent registered public accounting firm for the fiscal year ending December 31, 2011.
 - An advisory (non-binding) resolution to approve the compensation of our executives disclosed in this Proxy Statement; and
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- An advisory (non-binding) resolution to determine the frequency of an advisory vote on executive compensation.

How do I vote?

You may either vote “For” all the nominees to the Board of Directors or you may “Withhold” your vote for any nominee you specify. For each of the other matters to be voted on, other than for Proposal IV, you may vote “For” or “Against” or abstain from voting. For Proposal IV you may vote “1 year”, “2 years” or “3 years” or abstain from voting. The procedures for voting are fairly simple:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote in person at the Annual Meeting, or vote by proxy using the enclosed proxy card or via the Internet or telephone (see “Voting Via the Internet or by Telephone” below). If you vote by proxy, your shares will be voted as you specify on the proxy card. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the Annual Meeting and vote in person if you have already voted by proxy.

- To vote in person, come to the Annual Meeting and we will give you a ballot when you arrive.
- To vote using the enclosed proxy card, simply complete, sign and date the enclosed proxy card and return it promptly in the envelope provided. If you return your signed proxy card to reach us before the Annual Meeting, we will vote your shares as you direct.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank, or other agent, you should have received a proxy card and voting instructions with these proxy materials from that organization rather than from the Company. Simply complete and mail the proxy card to ensure that your vote is counted. To vote in person at the Annual Meeting, you must obtain a valid proxy from your broker, bank, or other agent. Follow the instructions from your broker or bank included with these proxy materials, or contact your broker or bank to request a proxy form.

Voting Via the Internet or by Telephone

Stockholders may grant a proxy to vote their shares by means of the telephone or via the Internet. The laws of the State of Delaware, under which the Company is incorporated, specifically permit electronically transmitted proxies, provided that each such proxy contains or is submitted with information from which the Inspector of Elections can determine that such proxy was authorized by the stockholder.

The telephone and Internet voting procedures below are designed to authenticate stockholders’ identities, to allow stockholders to grant a proxy to vote their shares and to confirm that stockholders’ instructions have been recorded properly. Stockholders granting a proxy to vote via the Internet should understand that there may be costs associated with electronic access, such as usage charges from Internet access providers and telephone companies, which must be borne by the stockholder.

For Shares Registered in Your Name

Stockholders of record may go to <http://proxy.georgeson.com> to grant a proxy to vote their shares by means of the Internet. They will be required to provide the control number contained on their proxy cards. Any stockholder using a touch-tone telephone may also grant a proxy to vote shares by calling 877-456-7915 and following the operator’s instructions.

For Shares Registered in the Name of a Broker or Bank

Most beneficial owners whose stock is held in street name receive instructions for granting proxies from their banks, brokers or other agents, rather than the Company’s proxy card.

General Information for All Shares Voted Via the Internet or By Telephone

Votes submitted via the Internet or by telephone must be received by 11:59 p.m. EST on April 28, 2011. Submitting your proxy via the Internet or by telephone will not affect your right to vote in person should you decide to attend the Annual Meeting.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock of the Company you own as of March 9, 2011.

What if I return a proxy card but do not make specific choices?

If you return a signed and dated proxy card without marking any voting selections, your shares will be voted “For” all the nominees to the Board of Directors in Proposal I, “For” Proposals II and III, and “3 years” for Proposal IV. If any other matter is properly presented at the meeting, your proxy (i.e., one of the individuals named on your proxy card) will vote your shares using his or her best judgment.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these mailed proxy materials, we will bear the cost of soliciting proxies by the Board. In addition to the solicitation of proxies by mail, solicitation may be made personally or by telephone or electronic communication by our directors, officers and employees, none of whom will receive additional compensation for these services, and by Georgeson Inc., who we have retained to aid in the solicitation of proxies. We will pay Georgeson Inc. a fee of \$13,500 plus expenses for these services. We will also reimburse brokers and other nominees for their reasonable out-of-pocket expenses incurred in connection with distributing forms of proxies and proxy materials to the beneficial owners of common stock.

What does it mean if I receive more than one proxy card?

If you receive more than one proxy card, your shares are registered in more than one name or are registered in different accounts. Please complete, sign and return each proxy card to ensure that all of your shares are voted.

Can I change my vote after submitting my proxy?

Yes. You may revoke your proxy at any time before the final vote at the meeting. If you are the record holder of your shares, you may revoke your proxy in any one of four ways:

- You may issue a proxy with a later date.
- You may send a written notice that you are revoking your proxy to the Company’s Secretary at 50 South Buckhout Street, Suite 1, Irvington, New York 10533.
- You may vote by telephone or via the Internet.
- You may attend the Annual Meeting and vote in person. Simply attending the meeting will not, by itself, revoke your proxy.

If your shares are held by your broker or bank as a nominee or agent, you must follow the instructions provided by your broker or bank.

When are stockholder proposals due for next year’s Annual Meeting?

Under Rule 14a-8 promulgated under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), 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 of stockholders in the year 2012, a stockholder proposal must be received by the Company no later than November 25, 2011 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 2012, although not included in the Proxy Statement, a stockholder proposal or nomination(s) must comply with the requirements of the Company's Third Amended and Restated Bylaws (the "Bylaws") and be received by the Company no later than the close of business on January 30, 2012 and no earlier than the close on business on December 30, 2011; provided, however, that in the event that the date of the 2012 annual meeting is more than thirty (30) days before or more than sixty (60) days after April 29, 2012, notice by the stockholder to be timely must be so delivered not earlier than the close of business on the one hundred and twentieth (120th) day prior to such annual meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such annual meeting or the close of business on the tenth (10th) day following the day on which public announcement of the date of such meeting is first made by the Company. Stockholder proposals should be delivered in writing to MELA Sciences, Inc., 50 South Buckhout Street, Suite 1, Irvington, New York 10533, Attention: Secretary. A copy of the Company's Bylaws may be obtained from the Company upon written request to the Secretary.

How are votes counted?

Votes will be counted by the Inspector of Elections appointed for the meeting, who will separately tabulate "For", "Against" and "Withhold" votes, votes on the frequency of holding an advisory vote on executive compensation, abstentions and broker non-votes. A broker non-vote occurs when a nominee holding shares for a beneficial owner does not vote on a particular proposal because the nominee does not have discretionary voting power with respect to that proposal and has not received instructions with respect to that proposal from the beneficial owner (despite voting on at least one other proposal for which it does have discretionary authority or for which it has received instructions). If your shares are held by your broker as your nominee (that is, in "street name"), you will need to obtain a proxy form from the institution that holds your shares and follow the instructions included on that form regarding how to instruct your broker to vote your shares. If you do not give instructions to your broker, your broker can vote your shares with respect to "discretionary" items, but not with respect to "non-discretionary" items. Discretionary items are proposals considered routine under the rules of the NASDAQ Capital Market ("NASDAQ") on which your broker may vote shares held in street name in the absence of your voting instructions. On non-discretionary items for which you do not give your broker instructions, the shares will be treated as broker non-votes.

How many votes are needed to approve each proposal?

- Proposal No. I, the election of directors, the seven nominees receiving the most "For" votes (among votes properly cast in person or by proxy) will be elected. Broker non-votes will count towards the quorum but will have no effect on the outcome of the vote. Stockholders do not have the right to cumulate their votes for directors.
- Proposal No. II, the ratification of EisnerAmper LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2011, must receive a "For" vote from the majority of shares present and entitled to vote either in person or by proxy to be approved. Abstentions will have the same effect as an "Against" vote. Broker non-votes will have no effect on the outcome of the vote.
- Proposal No. III, an advisory (non-binding) resolution to approve the compensation of our executives disclosed in this Proxy Statement, must receive a "For" vote from the majority of shares present and entitled to vote either in person or by proxy to be approved. Abstentions will have the same effect as an "Against" vote. Broker non-votes will have no effect on the outcome of the vote.

- Proposal IV, the frequency of the advisory (non-binding) vote on executive compensation, the number of years receiving the greatest number of votes (i.e. one, two or three years) will be considered the frequency recommended by stockholders. Abstentions and broker non-votes will therefore have no effect on such vote.

Although the advisory votes on Proposals III and IV are non-binding, as provided by law, our Board of Directors will review the results of the votes and will take them into account in making a determination concerning executive compensation and the frequency of such advisory votes.

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if at least a majority of the outstanding shares entitled to vote are represented by votes at the meeting or by proxy. On the record date, there were 25,262,538 shares outstanding and entitled to vote.

Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you vote in person at the meeting or by telephone or via the Internet. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, the chairman of the meeting or a majority of the votes present at the meeting may adjourn the meeting to another date.

How can I find out the results of the voting at the Annual Meeting?

Preliminary voting results will be announced at the Annual Meeting. Final voting results will be published in a Current Report on Form 8-K filed by the Company within four business days of the Annual Meeting.

How can I obtain additional copies?

For additional copies of this Proxy Statement and the enclosed proxy card and 2010 Annual Report to Stockholders, you should contact our corporate office at 50 South Buckhout Street, Suite 1, Irvington, New York 10533, Attention: Secretary, telephone (914) 591-3783.

PROPOSAL I ELECTION OF DIRECTORS

There are seven nominees for the nine director positions presently authorized by the Company's Board of Directors and the Company's Bylaws. The vacant directorships may be filled in the future at the discretion of the Company's Board of Directors. This discretionary power gives us the flexibility of appointing new directors in periods between our Annual Meetings should suitable candidates come to our attention. The names of the persons who are nominees for director and their positions and offices with the Company are set forth in the table below. Each director to be elected will hold office until the 2012 Annual Meeting of Stockholders and until his successor is elected and has qualified, or until such director's earlier death, resignation or removal. Each nominee listed below is currently a director of the Company. Although there is no formal policy, the Company encourages its directors to attend the Company's annual meetings.

Directors are elected by a plurality of the votes present in person or represented by proxy and entitled to vote at the Annual Meeting. Shares represented by executed proxies will be voted, if authority to do so is not withheld, for the election of the seven nominees named below. In the event that any nominee should be unavailable for election as a result of an unexpected occurrence, your shares will be voted for the election of a substitute nominee as management may propose. Each of the current directors has been nominated for and has agreed to stand for election and management has no reason to believe that any nominee will be unable to serve.

Table of Contents

The following is a brief biography of each nominee for director, including their respective ages as of February 28, 2011:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Joseph V. Gulfo, M.D.	47	Director, President and Chief Executive Officer
Breaux Castleman	70	Director, Chairman of the Board of Directors
Sidney Braginsky	73	Director
George C. Chryssis	63	Director
Martin D. Cleary	65	Director
Anne Egger	58	Director
Gerald Wagner, Ph.D.	67	Director

Joseph V. Gulfo, M.D., has served as our President and Chief Executive Officer and a member of our Board of Directors since January 2004. From May 1999 to November 2003, he served as Chairman, Chief Executive Officer and President of Antigen Express, Inc., a development-stage company developing immunodiagnostics and therapeutics for cancer. Dr. Gulfo serves as a director of ProCertus BioPharm, Inc., a privately-held company. Dr. Gulfo received a B.S. in biology from Seton Hall University, an M.D. from the University of Medicine and Dentistry of New Jersey and an M.B.A. in finance from Seton Hall University. We believe Mr. Gulfo's qualifications to serve on our Board of Directors include his intimate knowledge of our operations as a result of his day to day leadership as our Chief Executive Officer.

Breaux Castleman has served as a member of our Board of Directors and as Chairman of our Board of Directors since July 2003 and has been a consultant to the Company since June 2003. Since August 2001, he has served as President, Chief Executive Officer and Chairman of Syntiro Healthcare Services, Inc. Mr. Castleman also serves as a director of FemPartners, Inc., NextCare, Inc. and MedDirect Inc., all privately-held companies. Previously he held positions as President of the Scripps Clinic, President of Caremark International's Physician Resource Group, and CEO of the Kelsey-Seybold Clinic. He holds a B.A. in economics from Yale University. We believe Mr. Castleman's qualifications to serve on our Board of Directors include his many years of executive experience in the healthcare industry.

Sidney Braginsky has served as a member of our Board of Directors since 2001. Mr. Braginsky has also served as the Chairman and Chief Executive Officer of Digilab Corp. (a spectroscopy instruments manufacturer) since 2005, and as Chairman of Activeases Corp. (a therapeutic device manufacturer) since 2007. From 1970 until 2000, Mr. Braginsky served as President of Olympus Corp. Mr. Braginsky is currently a director and member of the audit committee of DJO, Inc. (a Blackstone Group company) and served as a director of Noven Pharmaceuticals, Inc. until 2009. He is also Chairman of the International Standards Organization U.S. Technical Advisory Group TC 172 on Optics and Photonics, Chairman of the Board of the City University of New York Robert Chambers Laboratory and Trustee on the boards of Long Island High Tech Incubator and the Long Island Museum of Science and Technology. He formerly served as President of Mediscience Corp. and Chairman of Double D Venture Fund, LLC. Mr. Braginsky received his B.S. in biology from Queens College. We believe Mr. Braginsky's qualifications to serve on our Board of Directors include his experience as a Chief Executive Officer of a medical devices company and his many years of experience in the industry.

George C. Chryssis has served as a member of our Board of Directors since 2001. Since January 2011, Mr. Chryssis has been President of the Benjamin Franklin Institute of Technology. From February 2009 to December 2010, he served as Vice-President at Wentworth Institute of Technology. From June 1999 until their dissolution on December 31, 2005, he served as the managing member of Arcadian Capital Management, LLC and General Partner of Arcadian Venture Partners, LP, a venture capital firm with investments in early-stage companies, including a past investment in our Company. From August 2003 to January 2009, Mr. Chryssis served as President, CEO and Chairman of the Board of Directors of Itergon Corp., a privately-held IT services company, which he founded. Since 2003, he has also served as Chairman of the Board of Directors of DelCom Corp., a privately-held telecommunications software company. Mr. Chryssis received a B.S. and M.S. degrees in electrical engineering from Northeastern University, and an honorary Doctor of Engineering

Technology degree from Wentworth Institute of Technology. We believe Mr. Chryssis' qualifications to serve on our Board of Directors include his experience as a Chief Executive Officer of a high-technology company, as a founder of several companies, and having served on the Board of Trustees and Audit Committees of several higher education institutions.

Martin D. Cleary was appointed as a member of our Board of Directors in October 2005. He currently serves as Chairman and CEO of Amarantus Therapeutics, a biotech company. Mr. Cleary is also Chairman of the Board of Directors of Fish Nature Inc., a company developing high tech products for the sport fishing industry. Previously, Mr. Cleary served as Chairman and CEO of Juvaris BioTherapeutics, an immunotherapeutic vaccine company, which he founded in 2003. From 1999 to 2002, Mr. Cleary was President, CEO and Director of gene therapy company Genteric, Inc. From 1996 until its merger with Boston Scientific Corporation in 1998, Mr. Cleary was co-founder, CEO and Director of CardioGene Therapeutics, a cardiovascular gene therapy company. From 1993 to 1994, Mr. Cleary was President and CEO of Theragen, a diversified gene-therapy company, which merged with GenVec, Inc. From 1994 to 1996, Mr. Cleary served on the Board of Directors of GenVec. From 1986 to 1993, Mr. Cleary was Group Vice President and CFO of Cytogen Corporation, a biotech company. Prior to that, Mr. Cleary held several senior management positions with Johnson & Johnson, Inc. over a 14-year career, including Vice President of Operations at Johnson & Johnson's IOLAB Corporation from 1980 to 1986. Mr. Cleary received a BS in accounting from Rutgers University in 1971 and a certificate in international studies from Columbia University in 1973. We believe Mr. Cleary's qualifications to serve on our Board of Directors include his experience in leading complex enterprises and his experience as a senior executive.

Anne Egger was elected as a member of our Board of Directors in June 2009 and has been a consultant to the Company since March 2009. From October 1988 until her retirement in March of 2009, Ms. Egger served as head of the U.S. Sales and Marketing division of Galderma Laboratories, a joint venture between Nestlé and L'Oréal. Ms. Egger was also an Industry Adjunct member of the American Academy of Dermatology for the past 7 years and a member of the American Society of Dermatologic Surgeons Industry Council for the last 5 years. We believe Ms. Egger's qualifications to serve on our Board of Directors include her almost 30 years of experience in pharmaceutical sales and marketing and two decades in dermatology.

Gerald Wagner, Ph.D. was appointed as a member of our Board of Directors in May 2005 and was our acting Chief Operating Officer from January 2006 until January 2007. He currently serves as a consultant to the Company. Since 2002, he has owned and operated Gerald Wagner Consulting LLC, an international consulting company specializing in international project management, technology and application consulting, and company assessments. Dr. Wagner serves as a board member for IntegraGen S.A, Evry, France. From March 1992 to September 2003, he was a Senior Vice President, Lab Testing Systems, at Bayer, Inc. Dr. Wagner received a Masters and Ph.D. in electro-mechanical design from Technical University, Darmstadt, Germany. We believe Dr. Wagner's qualifications to serve on our Board of Directors include his years of experience providing strategic advisory services to complex organizations.

Director Emeritus

Dan Lufkin has served as Director Emeritus of our Company since April 2010. and previously served on our Board of Directors since 2003. Mr. Lufkin was co-founder and Chairman of the investment banking firm, Donaldson, Lufkin & Jenrette, Inc. Mr. Lufkin currently serves as a consultant to, and/or board member of, a number of private companies and non-profit endeavors. Mr. Lufkin received a B.A. degree from Yale University and an M.B.A. from Harvard Business School.

**THE BOARD OF DIRECTORS RECOMMENDS
A VOTE "FOR" ALL OF THE NOMINEES IN PROPOSAL I**

CORPORATE GOVERNANCE

Independence of the Board of Directors

As required under the NASDAQ listing standards, a majority of the members of a listed company's Board of Directors must qualify as "independent," as affirmatively determined by the Board of Directors. The Company's Board of Directors consults with the Company's counsel to ensure that the Board's determinations are consistent with all relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in pertinent listing standards of NASDAQ, as are in effect from time to time.

Consistent with these considerations, after review of all relevant transactions or relationships between each director, or any of his or her family members, and the Company, its senior management and its independent registered public accounting firm, the Board of Directors has affirmatively determined that all of the Company's directors are independent directors within the meaning of the applicable NASDAQ listing standards, except Dr. Gulfo, the President and Chief Executive Officer of the Company.

Information Regarding the Board of Directors and its Committees

The Company's Board of Directors has an audit committee, a compensation committee and a nominating committee. The following table provides membership information for 2010 for each of these committees:

<u>Name</u>	<u>Audit</u>	<u>Compensation</u>	<u>Nominating</u>
Breaux Castleman		X	X
Sidney Braginsky	X		X
George C. Chryssis	X		
Martin D. Cleary	X		X
Anne Egger		X	
Gerald Wagner		X	

Below is a description of each committee of the Board of Directors. Each of the committees has authority to engage legal counsel or other experts or consultants, as it deems appropriate to carry out its responsibilities. The Board of Directors has determined that each member of each committee meets the applicable rules and regulations regarding "independence" and that each member is free of any relationship that would interfere with his or her individual exercise of independent judgment with regard to the Company.

Board Leadership Structure

We separate the roles of Chief Executive Officer and Chairman of the Board in recognition of the differences between the two roles. Our Chief Executive Officer is responsible for setting the strategic direction for the Company and the day to day leadership and performance of the Company, while the Chairman of the Board provides guidance to our Chief Executive Officer and sets the agenda for Board meetings and presides over meetings of the full Board.

Audit Committee

The current members of our audit committee are Messrs. Braginsky, Chryssis and Cleary each of whom we believe satisfies the independence requirements of NASDAQ and the Securities and Exchange Commission (the "SEC"). Mr. Cleary chairs this committee. We believe Mr. Cleary is qualified as an audit committee financial expert under the regulations of the SEC and has the accounting and related financial management expertise required by NASDAQ. Our audit committee assists our Board of Directors in its oversight of:

- the integrity of our financial statements;
- our independent registered public accounting firm's qualifications and independence; and
- the performance of our independent auditors.

The audit committee has the sole and direct responsibility for appointing, evaluating and retaining our independent registered public accounting firm and overseeing their work. All audit services to be provided to us and all non-audit services, other than de minimis non-audit services, to be provided to us by our independent auditors must be approved in advance by our audit committee.

The charter of our audit committee is available in the Corporate Governance section of the Investor Relations section of the Company's website at www.melasciences.com.

Compensation Committee

The current members of our compensation committee are Messrs. Castleman, and Wagner, and Ms. Egger each of whom we believe satisfies the independence requirements of NASDAQ. Mr. Castleman chairs this committee. The purpose of our compensation committee is to discharge the responsibilities of our Board of Directors relating to compensation of our executive officers. Specific responsibilities of our compensation committee include:

- reviewing and recommending compensation of our executive officers;
- administering our stock incentive plans; and
- reviewing and recommending incentive compensation and equity plans.

A narrative description of our compensation committee's processes and procedures for the consideration and determination of executive and director compensation is included in the Compensation Discussion and Analysis in this Proxy Statement.

The charter of our compensation committee is available in the Corporate Governance section of the Investor Relations section of the Company's website at www.melasciences.com.

Nominating Committee

The current members of our nominating committee are Messrs. Braginsky, Castleman and Cleary, each of whom we believe satisfies the independence requirements of NASDAQ. Mr. Braginsky chairs this committee. Our nominating committee identifies and recommends nominees for election to our Board of Directors.

The nominating committee has not adopted specific minimum criteria for director nominees. The committee identifies nominees by first evaluating the current members of the Board of Directors willing to continue in service. Current members of the Board of Directors with skills and experience that are relevant to the Company's business and who are willing to continue in service are considered for re-nomination. If any member of the Board of Directors does not wish to continue in service, or if the nominating committee decides not to nominate a member for re-election, the nominating committee first considers the appropriateness of the size of the Board of Directors. If the nominating committee determines that the Board seat should be retained and a vacancy exists, the committee considers factors that it deems are in the best interests of the Company and its stockholders in identifying and evaluating a new nominee.

In identifying suitable candidates for nomination as a director, the nominating committee will consider the needs of the Board of Directors and the range of skills and characteristics required for effective functioning of the Board of Directors. In evaluating such skills and characteristics, the nominating committee may take into consideration such factors as it deems appropriate, such as a nominee's business and professional expertise and experiences, including particular experience in areas relevant to the Company's business activities, concern for long-term interests of the stockholders, and personal integrity and judgment. The committee does not assign specific weights to particular criteria and no particular criterion is necessarily applicable to all prospective nominees. We believe that the backgrounds and qualifications of our directors, considered as a group, should provide a diverse mix of experience, knowledge and abilities that will allow the Board to fulfill its responsibilities to our stockholders.

The nominating committee will consider all bona fide candidates for election to the Board of Directors and will consider any stockholder nominations pursuant to the same criteria, provided those nominated are

submitted pursuant to the process described in the Company's Bylaws and applicable law and within the time periods set forth herein for receipt of stockholder proposals for the 2011 Annual Meeting of Stockholders. To date, the Company has not received any recommendations from stockholders for candidates for inclusion on the committee's slate of nominees.

The charter of our nominating committee is available in the Corporate Governance section of the Investor Relations section of the Company's website at www.melasciences.com.

Meetings of the Board of Directors and Committees

The Board of Directors met thirteen times during the last fiscal year and acted twice by unanimous written consent. All directors attended at least 75% of the meetings of the Board of Directors held during the period for which they were a director.

During the last fiscal year, the audit committee met four times, the compensation committee met five times and acted twice by unanimous written consent, and the nominating committee acted once by unanimous written consent. All directors attended at least 75% of the meetings of the Board of Directors committees on which they served held during the period for which they were a committee member.

All of our directors attended the April 30, 2010 Annual Meeting of Stockholders. We do not maintain a formal policy regarding director attendance at our annual meeting of stockholders.

The Board's Role in Risk Oversight

The Board has an active role, as a whole and also at the committee level, in overseeing management of the Company's risks. The Board regularly reviews information regarding the Company's credit, liquidity and operations, as well as the risks associated with each. The compensation committee is responsible for overseeing the management of risks relating to the Company's executive compensation plans and arrangements. The audit committee oversees management of financial risks. The nominating committee manages risks associated with the independence of the Board of Directors and potential conflicts of interest of director nominees. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, the entire Board of Directors is regularly informed through committee reports about such risks.

Stockholder Communications with the Board of Directors

We do not have a formal policy regarding stockholder communication with the Board of Directors. However, stockholders of the Company may communicate directly with the Board of Directors in writing, addressed to:

Board of Directors
c/o Secretary
MELA Sciences, Inc.
50 South Buckhout Street, Suite 1
Irvington, New York 10533

The Secretary will review each stockholder communication. The Secretary will forward to the entire Board of Directors (or to members of a Board of Directors' committee, if the communication relates to a subject matter clearly within that committee's area of responsibility) each communication that (a) relates to the Company's business or governance, (b) is not offensive and is legible in form and reasonably understandable in content, and (c) does not relate to a personal grievance against the Company or an employee or to further a personal interest not shared by the other stockholders generally. Stockholders who would like their submissions directed to an individual member of the Board of Directors may so specify, and the communication will be forwarded, as appropriate.

Code of Business Conduct and Ethics

The Company has adopted MELA Sciences, Inc. Code of Business Conduct and Ethics that applies to all officers, directors and employees. The Code of Business Conduct and Ethics is available in the Corporate Governance section of the Investor Relations section of the Company’s website at www.melasciences.com. If the Company makes any substantive amendments to the Code of Business Conduct and Ethics or grants any waiver from a provision of the Code to any executive officer or director, the Company will promptly disclose the nature of the amendment or waiver on its website.

Policy and Procedures Governing Related Person Transactions

In accordance with its charter, the audit committee is responsible for reviewing all “related party transactions” (defined as such transactions required to be disclosed pursuant to Item 404 of Regulation S-K) on an on-going basis. All such related party transactions must be approved by the audit committee.

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS*

The audit committee oversees the Company's financial reporting process on behalf of the Board of Directors. Management has the primary responsibility for the financial statements and the reporting process, including the systems of internal control over financial reporting and disclosure controls and procedures. In fulfilling its oversight responsibilities, the audit committee reviewed the audited financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2010 with management, including a discussion of the quality, not just the acceptability, of the accounting principles, the reasonableness of significant judgments, and the clarity of disclosures in the financial statements.

The audit committee is responsible for reviewing, approving and managing the engagement of the Company's independent registered public accounting firm, including the scope, extent and procedures of the annual audit and compensation to be paid therefore, and all other matters the audit committee deems appropriate, including the Company's independent registered public accounting firm's accountability to the Board of Directors and the audit committee. The audit committee reviewed with the Company's independent registered public accounting firm, which is responsible for expressing an opinion on the conformity of audited financial statements with generally accepted accounting principles, its judgment as to the quality, not just the acceptability, of the Company's accounting principles and such other matters as are required to be discussed with the audit committee under auditing standards generally accepted in the United States, including those described in Statement on Auditing Standards No. 61, as amended, "Communication with Audit Committees," and discussed and reviewed the results of the Company's independent registered public accounting firm's examination of the financial statements. In addition, the audit committee discussed with the Company's independent registered public accounting firm the independent registered public accounting firm's independence from management and the Company, including the matters in the written disclosures and the letter regarding its independence as required by the applicable requirements of the Public Company Oversight Board regarding the independent accountant's communications with the audit committee concerning independence. The audit committee also considered whether the provision of non-audit services was compatible with maintaining the independent registered public accounting firm's independence.

The audit committee discussed with the Company's independent registered public accounting firm the overall scope and plans for its audits, and received from them written disclosures and letter regarding their independence. The audit committee meets with the Company's independent registered public accounting firm, with and without management present, to discuss the results of its examinations, its evaluations of the Company's internal control over financial reporting and the overall quality of the Company's financial reporting. The audit committee held four meetings during the fiscal year ended December 31, 2010.

In reliance on the reviews and discussions referred to above, the audit committee recommended to the Board of Directors (and the Board of Directors has approved) that the audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2010 for filing with the Securities and Exchange Commission. The audit committee has also retained EisnerAmper LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2011.

AUDIT COMMITTEE:

Sidney Braginsky
George Chryssis
Martin D. Cleary

* The material in this report is not "soliciting material," is not deemed "filed" with the SEC and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

PROPOSAL II
RATIFICATION OF SELECTION OF INDEPENDENT
REGISTERED PUBLIC ACCOUNTING FIRM

The audit committee of the Board of Directors has selected EisnerAmper LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2011 and has further directed that management submit the selection of EisnerAmper LLP as the Company's independent registered public accounting firm for ratification by the stockholders at the Annual Meeting. EisnerAmper LLP audited the Company's financial statements in 2009 and 2010. Representatives of EisnerAmper LLP are expected to be present at the Annual Meeting, will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Stockholder ratification of the selection of EisnerAmper LLP as the Company's independent registered public accounting firm is not required by the Company's Bylaws or otherwise. However, the Board of Directors, on behalf of the audit committee, is submitting the selection of EisnerAmper LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the audit committee will reconsider whether or not to retain that firm. Even if the selection is ratified, the audit committee in its discretion may direct the appointment of different independent registered public accounting firm at any time during the year if they determine that such a change would be in the best interests of the Company and its stockholders.

Vote Required. The affirmative vote of a majority of our shares of common stock present, whether in person or represented by proxy, and entitled to vote at the Annual Meeting is required to ratify the selection of EisnerAmper LLP. Unless otherwise indicated, properly executed proxies will be voted in favor of this Proposal II.

THE BOARD OF DIRECTORS RECOMMENDS
A VOTE "FOR" PROPOSAL II

Principal Accountant Fees

The following is a summary of the aggregate fees billed to the Company by EisnerAmper LLP for professional services rendered during the fiscal years ended December 31, 2009 and December 31, 2010:

	Fiscal Year Ended December 31,	
	2009	2010
Audit Fees	\$203,469	\$212,019
Audit-Related Fees	100,003	74,544
Tax Fees	15,000	23,662
All Other Fees	—	—
Total Fees	\$318,472	\$310,225

Audit Fees. Audit Fees consisted of fees covering the audits of the Company's financial statements which were billed during the respective year, including work on quarterly reports and work on Sarbanes-Oxley matters.

Audit-Related Fees. Audit-Related Fees for 2009 consisted of fees for audit work done related to the filing with the SEC of an S-3 Registration Statement in May 2009. Audit-Related Fees for 2010 consisted of fees for audit work done related to the filing with the SEC of an S-3 Registration Statement in May 2010, and a Prospectus Supplement in July 2010.

Tax Fees. The 2009 and 2010 Tax Fees related to the preparation of the Company's 2008 and 2009 Federal and State income tax returns and associated estimated payments and applications for filing extensions and the undertaking of a study to analyze the amount and timing of the tax loss carryforwards.

All Other Fees. There were no other fees billed by EisnerAmper LLP for the years ending December 31, 2009 and December 31, 2010, respectively.

Pre-Approval of Audit and Non-Audit Services

The services performed by EisnerAmper LLP in 2010 were pre-approved by the audit committee. The audit committee pre-approves all audit services and permitted non-audit services performed or proposed to be undertaken by the independent registered public accounting firm, except where such services are determined to be de minimis under the Exchange Act, giving particular attention to the relationship between the types of services provided and the independent registered public accounting firm's independence. The audit committee may delegate pre-approval authority to one or more of its members. The member to whom such authority is delegated must report, for informational purposes only, any pre-approval decisions to the audit committee at its next scheduled meeting.

PROPOSAL III

ADVISORY (NON-BINDING) VOTE ON EXECUTIVE COMPENSATION

The Company is providing stockholders an advisory vote on executive compensation as required by Section 14A of the Exchange Act. Section 14A was added to the Exchange Act by Section 951 of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"). On January 25, 2011, the Securities and Exchange Commission ("SEC") adopted rules to implement the requirements of Section 14A of the Exchange Act.

As described in the Compensation Discussion and Analysis section of this Proxy Statement (the "CD&A"), the principal goals of our compensation philosophy are to attract, motivate and retain highly talented individuals at all levels of our organization and to align our employees' incentives with the long-term interests of our stockholders.

At this stage in our growth, our principal business objective is to obtain premarket (PMA) approval of our flagship product, MelaFind®. Achievement of this objective requires that we closely monitor our expenses, including compensation expenses. Accordingly, we seek to target our cash compensation levels at or below market and pay a significant portion of total compensation in the form of stock options. As we move towards FDA and other regulatory approvals, we expect to re-evaluate our compensation philosophy and establish additional performance milestones appropriate for our overall business strategy.

Stockholders are urged to read the CD&A, which discusses how our compensation policies and procedures implement our compensation philosophy, as well as the Summary Compensation Table and other related compensation tables and narrative disclosure which describe the compensation of our five most highly-compensated executive officers in 2010. The Compensation Committee and the Board of Directors believe that the policies and procedures articulated in the CD&A are effective in implementing our compensation philosophy and in achieving its goals and that the compensation of our Named Executive Officers in fiscal 2010 reflects and supports these compensation policies and procedures.

Stockholders are being asked to vote on the following resolution:

RESOLVED, that the compensation paid to the Company's named executive officers, as disclosed pursuant to Item 402 of Regulation S-K, including the Compensation Discussion and Analysis, compensation tables and narrative discussion, is hereby APPROVED.

This advisory vote on executive compensation, commonly and herein referred to as a "say-on-pay" advisory vote, is not binding on our Board of Directors. However, the Board of Directors and the Compensation Committee will take into account the result of the vote when determining future executive compensation arrangements.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" PROPOSAL III

PROPOSAL IV

**ADVISORY (NON-BINDING) VOTE ON THE FREQUENCY OF
ADVISORY VOTES ON EXECUTIVE COMPENSATION**

As required by Section 14A of the Exchange Act and Section 951 of the Dodd-Frank Act, we are also providing stockholders an advisory vote on the frequency with which the stockholders shall have the advisory say-on-pay vote on executive compensation provided for in Proposal III above. On January 25, 2011, the SEC adopted rules pursuant to Section 14A of the Exchange Act and Section 951 of the Dodd-Frank Act. The Dodd-Frank Act requires an advisory vote on the frequency of the say-on-pay vote for annual meetings taking place on or after January 21, 2011.

The advisory vote on the frequency of the say-on-pay vote is a non-binding vote as to how often the say-on-pay vote should occur: every year, every two years, or every three years. In addition, stockholders may abstain from voting. The Dodd-Frank Act requires us to hold the advisory vote on the frequency of the say-on-pay vote at least once every six years.

After careful consideration, the Board of Directors recommends that future stockholder say-on-pay advisory votes on executive compensation be conducted every three years. A vote every three years provides stockholders and advisory firms the opportunity to evaluate the Company's compensation program on a more thorough, longer-term basis than an annual or bi-annual vote.

The Board of Directors believes an annual or bi-annual say-on-pay vote would not allow for changes to the Company's compensation program to be in place long enough to evaluate whether the changes were effective. The Company's executive compensation plan seeks to align our employee incentives with the long-term interests of the stockholders. A say-on-pay vote every three years is also sensitive to stockholders who have interests in many companies and may not be able to devote sufficient time to an annual or bi-annual review of pay practices for all of their holdings.

Although the Board of Directors recommends a say-on-pay vote every three years, stockholders are not voting to approve or disapprove the Board's recommendation. Stockholders are being asked to vote on the following resolution:

RESOLVED, that the stockholders of the Company determine, on an advisory basis, whether the frequency with which the stockholders shall have an advisory vote on executive compensation set forth in the Company's Proxy Statement for its annual meeting of stockholders, beginning with the 2011 Annual Meeting of Stockholders, shall be (i) every year, (ii) every 2 years, or (iii) every 3 years.

Although this advisory vote on the frequency of the say-on-pay vote is not binding on our Board of Directors, the Board of Directors and the Compensation Committee will take into account the result of the vote when determining the frequency of future say-on-pay votes.

The enclosed proxy card gives you four choices for voting on this proposal. The choice which receives the highest number of votes will be deemed the choice of the stockholders.

***THE BOARD OF DIRECTORS RECOMMENDS
A VOTE "FOR" THE THREE-YEAR FREQUENCY***

EQUITY COMPENSATION PLAN INFORMATION

The following table sets out information with respect to compensation plans under which equity securities of our Company were authorized for issuance as of December 31, 2010.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options Warrants and Rights (#)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (\$)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (#)
Equity compensation plans approved by security holders	2,132,879	\$5.19	1,623,189
Equity compensation plans not approved by security holders	0	—	0
Total	2,132,879	\$5.19	1,623,189

Information regarding option awards to our named executive officers and directors in fiscal year 2010 and options held by such officers and directors at December 31, 2010 is provided in the “Grants of Plan-Based Awards For Year Ended December 31, 2010” table, the “Outstanding Equity Awards at 2010 Fiscal Year-End” table and the “Non-Employee Director Compensation Table For Year Ended December 31, 2010” table in the Executive Compensation section of this Proxy Statement.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the ownership of the Company’s common stock, par value \$0.001 (“Common Stock”), as of February 28, 2011 (except as noted) by: (i) each director and nominee for director; (ii) each of our executive officers who are named in the Summary Compensation Table presented later in this Proxy Statement; (iii) all executive officers and directors of the Company as a group; and (iv) all those known by the Company to be beneficial owners of more than five percent of its common stock.

Name of Beneficial Owner	Number of Shares of Common Stock Beneficially Owned	Beneficial Ownership(1) of Vested Options Included in Beneficially Owned	Percentage of Shares Beneficially Owned
Named Executive Officers			
Joseph V. Gulfo, M.D.	392,353	270,000	1.5%
Richard I. Steinhart	81,000	80,000	*
Tina Cheng-Avery	29,875	21,875	*
Nikolai Kabelev	79,000	79,000	*
Directors			
Breaux Castleman	132,738	22,500	*
Sidney Braginsky(2)	79,000	22,500	*
George C. Chryssis	63,500	22,500	*
Martin Cleary	63,943	22,500	*
Anne Egger	12,850	7,500	*
Gerald Wagner, Ph.D.	158,962	122,000	*
All directors and all executive officers as a group (10 persons)	1,093,221	670,375	4.2%
Holders of more than 5%			
BlackRock Inc. 40 East 52nd Street New York, NY 10022	1,548,097		6.1%
BAM Capital, LLC 1 Liberty Plaza 27th Floor New York, NY 10006	1,511,520		5.9%

* Less than one percent beneficially owned

- (1) This table is based upon information supplied by officers, directors and principal stockholders and Schedules 13G filed with the SEC. Unless otherwise indicated in the footnotes to this table and subject to community property laws where applicable, the Company believes that each of the stockholders named in this table has sole voting and investment power with respect to the shares indicated as beneficially owned. Applicable percentages are based on 25,262,538 shares outstanding on February 28, 2011, adjusted as required by rules promulgated by the SEC. Unless otherwise indicated, the address of each of the individuals and entities listed in this table is c/o MELA Sciences, at the address on the first page of this Proxy Statement.
- (2) Includes 51,500 shares of common stock held by Double D Venture Fund, LLC, an investment fund with which Mr. Braginsky is affiliated. Mr. Braginsky expressly disclaims ownership of these shares except to the extent of his pecuniary interest in Double D Venture Fund, LLC.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires the Company's directors and executive officers, and persons who own more than ten percent of a registered class of the Company's equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and other equity securities of the Company. Officers, directors and greater than ten percent stockholders are required by SEC regulation to furnish the Company with copies of all Section 16(a) forms they file.

To the Company's knowledge, based solely on a review of the copies of such reports furnished to the Company and written representations that no other reports were required, during the fiscal year ended December 31, 2010, all Section 16(a) filing requirements applicable to its officers, directors and greater than ten percent beneficial owners were complied with.

EXECUTIVE OFFICERS OF THE COMPANY

The Company's executive officers, their ages and their positions as of February 28, 2011, are as follows:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Joseph V. Gulfo, M.D.	47	Director, President and Chief Executive Officer
Richard I. Steinhart	53	Vice President, Finance, Chief Financial Officer, Treasurer, and Secretary
Tina Cheng-Avery	47	Vice President, Commercialization
Nikolai Kabelev	34	Vice President, Research and Development

Joseph V. Gulfo, M.D. has served as our President and Chief Executive Officer and a member of our Board of Directors since January 2004. From May 1999 to November 2003, he served as Chairman, Chief Executive Officer and President of Antigen Express, Inc., a development-stage company developing immunodiagnostics and therapeutics for cancer. Dr. Gulfo serves as a director of ProCertus BioPharm, Inc., a privately-held company. Dr. Gulfo received a B.S. in biology from Seton Hall University, an M.D. from the University of Medicine and Dentistry of New Jersey and an M.B.A. in finance from Seton Hall University.

Richard I. Steinhart has served as our Vice President, Finance and Chief Financial Officer and Treasurer since April 2006 and as our Secretary since November 2006. From May 1992 until joining the Company Mr. Steinhart was a Managing Director of Forest Street Capital/SAE Ventures, a boutique investment banking, venture capital, and management consulting firm focused on healthcare and technology companies. Prior to Forest Street Capital/SAE Ventures, he was Vice President and Chief Financial Officer of Emisphere Technologies, Inc. Mr. Steinhart's other experience includes seven years at CW Group, Inc., a venture capital firm focused on medical technology and biopharmaceutical companies, where he was a General Partner and Chief Financial Officer. Mr. Steinhart serves on the Board of Manhattan Pharmaceuticals, Inc., a

biopharmaceutical company and is Chairman of its Audit Committee. Mr. Steinhart began his career at Price Waterhouse, now known as PricewaterhouseCoopers. He holds B.B.A. and M.B.A degrees from Pace University and is a Certified Public Accountant.

Tina Cheng-Avery has served as our Vice President, Commercialization since February 2008. Previously, from April 2007 until joining the Company, she was Vice President of Marketing for Pierre Fabre Dermo-Cosmétique USA and from January 2005 until March 2007, she served as Global Marketing Director at Elizabeth Arden. From November 2001 until July 2004 she was Vice President of Marketing for Wella Personal Care, N.A. Mrs. Cheng-Avery holds a B.B.A. Finance degree from the University of Michigan and an M.B.A. in Marketing and International Business from the Kellogg School of Management at Northwestern University.

Nikolai Kabelev has served as our Vice President, Research and Development since January 2008. Previously, since January 2007 he served as our MelaFind® Project Team Leader. From June 2005 to present he has also served as a Director, Algorithm and Software Development for our Company. Prior to that, and since June 1999, he worked for us as a Computer Scientist. Prior to joining our Company he worked at the Center for Telecommunication Research at Columbia University. Nikolai holds B.Sc. degree in Computer Science from Transport and Telecommunication Institute (Riga Aviation University), Latvia.

Our executive officers are elected by, and serve at the discretion of, our Board of Directors. There are no family relationships between our directors and executive officers.

COMPENSATION DISCUSSION AND ANALYSIS

Overview

The principal goals of our compensation philosophy are to attract, motivate and retain highly talented individuals at all levels of our organization and to align our employees' incentives with the long-term interests of our stockholders.

At this stage in our growth, our principal business objective is to obtain premarket (PMA) approval of our flagship product, MelaFind®. Achievement of this objective requires that we closely monitor our expenses, including compensation expenses. Accordingly, we seek to target our cash compensation levels at or below market and pay a significant portion of total compensation in the form of stock options. As we move towards FDA and other regulatory approvals, we expect to re-evaluate our compensation philosophy and establish additional performance milestones appropriate for our overall business strategy.

We utilize a compensation package for our executive officers that includes cash in the form of base pay with discretionary bonus and long-term incentive compensation in the form of stock options. Because of our need to conserve cash, we target the cash portion of our compensation package that is either at, or slightly below, market levels. However, we seek to set our level of stock option awards in line with industry comparables. All of our stock option grants are tied to either length of service or to the achievement of certain performance-based milestones, the most significant goal of which is approval of MelaFind® by the FDA. We believe these elements support our underlying philosophy of attracting and retaining talented executives while remaining within our budgetary constraints and also creating incentives which reward company-wide and individual performance and aligning the interests of our executive officers with those of our stockholders by providing our executive officers equity-based incentives to ensure motivation over the long-term.

During 2010 our Director of Human Resources conducted an analysis of industry standards and regional pay practices and benchmarked the compensation of our employees and of certain of our executive officers. Based on this analysis she re-evaluated the work done by A.G. Ferguson & Associates, Inc. (AGF), a consulting firm with more than 25 years of experience in executive compensation consulting, which we had previously engaged to review our executive level compensation policies and for future compensation planning. Our Director of Human Resources found that the conclusions reached in the AGF report remained valid for 2010.

The Company has a pay-for-performance methodology for all employees. All Company employees received performance evaluations which culminated in an overall performance rating that was tied to a specific merit increase. These increases, which generally range from 0 to 5%, were based on surveyed regional average wage increases. Our compensation committee reviews and approves, or recommends for approval by our Board of Directors, the compensation of our Chief Executive Officer and other executive officers, including their salaries, bonuses and incentive compensation levels, deferred compensation, executive perquisites, equity compensation, severance arrangements, change-in-control benefits and other forms of executive officer compensation. The compensation committee may delegate its authority to a subcommittee consisting of outside directors. The compensation committee meets without the presence of executive officers when deliberating and approving the compensation of our Chief Executive Officer, but may, at its discretion, invite our Chief Executive Officer to participate in discussions regarding the compensation of our other executive officers.

Components of Executive Compensation

We have historically applied a structure where a significant portion of our executive compensation comes in the form of long-term incentive compensation. While the allocation varies, in general our executive officers have a far greater percentage of their compensation in the form of long-term compensation than our non-executive employees. However, we firmly believe that all employees should have an equity ownership position in the Company. We believe this is a strong motivator and an important component of our overall compensation strategy.

Base Salaries. The base salary is the guaranteed portion of our executives' annual cash compensation. The base salary reflects the executive's experience, skill set, and the market value of that experience and skill set. An executive's base salary is adjusted as a result of an annual performance review and in recognition of his or her prior year's accomplishments.

Bonuses. We do not have a formalized bonus program however the Company does award discretionary bonuses as appropriate. Over the last several years, the Company has awarded these discretionary bonuses based on individual achievement.

Equity Compensation. The only form of equity compensation currently awarded by the compensation committee consists of stock options, both qualified and non-qualified. All of the options have been granted out of three stock option plans: our 1996 Stock Option Plan, our 2003 Stock Incentive Plan (the "2003 Plan") and our 2005 Stock Incentive Plan (the "2005 Plan"). Since January 1, 2005, the 2005 Plan is the only plan under which options or other stock awards may be granted. The 2005 Plan allows our Board of Directors to grant incentives to employees, directors, consultants and collaborating scientists in the form of qualified and non-qualified stock options and other stock awards. We have used stock options as a form of compensation because we believe it helps to attract, motivate and retain talented individuals and aligns their incentives with the long-term interests of our stockholders. Our Board of Directors and the compensation committee continue to evaluate the use of alternative forms of equity incentive compensation, including restricted stock awards, for future use.

Option awards under our 2005 Plan are granted at prices which are no less than the closing price of the Company's common stock on the date of the grant. Options granted under the 2005 Plan historically have been time-based and/or performance-based options, and vesting varies accordingly. Options that have been granted under this plan expire within five to ten years from the date of grant.

The Company records compensation expense associated with stock options and other forms of equity compensation in accordance with FASB ASC 718, Compensation-Stock Compensation. Under this method, the Company must recognize a compensation charge related to all stock option awards granted on or subsequent to January 1, 2006. This charge is based on the grant date fair value estimated in accordance with the provisions of ASC 718. A compensation charge is recorded when it is probable that performance or service conditions will be satisfied. The probability of vesting is updated at each reporting period and compensation is adjusted via a cumulative catch-up adjustment or prospectively depending upon the nature of the change.

SUMMARY COMPENSATION TABLE

The following table sets forth the compensation earned by our principal executive officer, principal financial officer and other executive officers during our last three completed fiscal years, such officers are referred to herein as the “named executive officers.”

Name and Principal Position	Year	Salary (\$)	Option Awards (\$)	Bonus (\$)	All Other Compensation (\$)	Total (\$)
Joseph V. Gulfo, M.D., President and Chief Executive Officer	2010	313,600			45,408(2)	359,008
	2009	306,685		150,000	60,700(2)	517,385
	2008	276,667	2,430,000(1)	65,000	56,134(2)	2,827,801
Richard I. Steinhart, Vice President Finance, Chief Financial Officer, Secretary and Treasurer	2010	221,250	76,064(1)	10,000		307,314
	2009	217,917		10,000		227,917
	2008	213,333		30,000		243,333
Tina Cheng-Avery, Vice President of Commercialization	2010	209,625		10,000		219,625
	2009	205,560		30,000		235,560
	2008	178,822	188,147(1)			366,969
Nikolai Kabelev, Vice President, Research And Development	2010	189,250	115,253(1)	10,000		314,503
	2009	184,333		20,000		204,333
	2008	179,199		20,000		199,199
Christiano Butler, Vice President Operations(4)	2010	150,257	34,576(1)	10,000	4,808(3)	199,641
	2009	164,043	50,877(1)	20,000	5,536(3)	240,456
	2008	157,608		17,500	5,258(3)	180,366

(1) Option award amounts included in this table reflect the grant date fair value of such awards.

(2) These amounts consists of (i) a stipend of \$3,000 per month which is intended to cover commutation expenses, home office expenses and certain communication expenses, (ii) Company matching contributions made under our SIMPLE IRA Plan of \$6,934, \$11,500 and \$9,408 for 2008, 2009 and 2010, respectively, and (iii) reimbursement of travel and lodging expense of \$13,200 and \$13,200 for 2008 and 2009, respectively.

(3) These amounts consist of Company matching contributions made under our SIMPLE IRA Plan.

(4) Mr. Butler resigned as an executive officer of the Company effective January 3, 2011.

Overall Compensation***President and Chief Executive Officer, Joseph V. Gulfo, M.D.***

On January 5, 2004 we entered into an employment agreement with Dr. Joseph V. Gulfo, our President and Chief Executive Officer, which has been extended to December 31, 2011 under an automatic extension provision. The employment agreement provides Dr. Gulfo with an annual base salary subject to periodic review by our Board of Directors, and yearly bonuses at the discretion of our Board of Directors.

In 2007, Dr. Gulfo received a base salary of \$260,000 effective April 1, 2007. Effective March 1, 2008, Dr. Gulfo received a salary increase to \$280,000 reflecting the Company’s pay-for-performance plan and considering the prevailing market, and he was awarded a \$65,000 discretionary cash bonus for 2008. In August 2009, Dr Gulfo received, based on the Company’s progress and in accordance with the Company’s pay-for-performance plan, a base salary increase to \$313,600, effective as of March 1, 2009, and was awarded a discretionary cash bonus of \$150,000. Dr. Gulfo did not receive an increase in base salary or a cash bonus in 2010.

Dr. Gulfo’s employment agreement also provided for three separate grants of stock options. The first two stock option grants for the purchase of a total of 81,753 shares of our Common Stock at an exercise price of \$0.46 per share have fully vested and were exercised on October 15, 2008. The number of shares of our Common Stock subject to the third stock option was based on a formula that can only be calculated at the time if and when the Company receives FDA approval of its PMA application for MelaFind®. On October 10, 2008, this formula based option, issued in 2004 to Dr. Gulfo from the Company’s 2003 Plan at an exercise

price of \$0.46 a share, was cancelled due to the fact that the grant was not compliant with Section 409A of the Internal Revenue Code, which was enacted subsequent to the grant. Based on 20,625,905 shares outstanding (on a fully-diluted basis), as of September 30, 2008 and assuming such number of shares remained as the total number of shares outstanding on the date we receive PMA approval of MelaFind®, the number of shares subject to this option would have been 743,283.

On October 10, 2008, in replacement of the cancelled stock options described in the preceding paragraph, Dr. Gulfo was granted stock options for 900,000 shares of Common Stock at an exercise price of \$3.75 (the closing price on the grant date) per share. Of the 900,000 common shares underlying these stock options granted to Dr. Gulfo, 180,000 shares vested immediately, 540,000 shares vest upon the Company receiving FDA approval of its PMA application for MelaFind®, and 180,000 shares vest in four equal annual installments commencing on October 10, 2009, which was the first anniversary of the date of grant. These 900,000 options expire ten years from the date of grant. In determining the underlying terms of the grant, the compensation committee considered the following: the fact that, in addition to accomplishing all tasks contemplated by the Board of Directors at the time of the 2004 grant, Dr. Gulfo also performed additional tasks, such as the completion of a significant private and public financing; since stockholder value is largely contingent upon the FDA's approval of our PMA application, a grant of options vesting upon PMA approval will induce Dr. Gulfo to continue to work towards this goal; and an option grant that vests over time will motivate Dr. Gulfo to continue his employment with the Company, thus promoting continuity of leadership among our executive officers, which is one of the goals of our compensation policy.

Based on its own internal analysis, including a comparison with several peer companies, the compensation committee has concluded that Dr. Gulfo's total compensation for 2010 fit within the Company's overall objectives and philosophy with respect to executive compensation.

Vice President, Finance and Chief Financial Officer, Secretary and Treasurer, Richard Steinhart

Our Vice President and Chief Financial Officer, Secretary and Treasurer, Richard Steinhart, joined us in April 2006. Mr. Steinhart's initial compensation, including base salary and stock option package, was primarily based upon such factors as his prior business experience and the Company's overall compensation philosophy. Mr. Steinhart received a base salary and a stock option grant for the purchase of 100,000 shares of common stock at an exercise price of \$5.82 per share. In accordance with our policy, these options were priced at the closing price on the date of grant as determined by the compensation committee. As is consistent throughout our executive ranks, Mr. Steinhart's options vest both over time and with the attainment of several corporate-wide milestones, as follows: 8,000 options vested immediately upon hiring; 32,000 options vesting annually over a period of four years; 40,000 options vesting upon completion of a corporate fundraising with gross proceeds of more than \$10 million; and 20,000 options vesting upon the Company receiving FDA approval of its PMA application for MelaFind®.

Effective March 1, 2008, and in accordance with the Company's pay-for-performance plan, Mr. Steinhart received a salary increase to \$215,000 and was awarded a \$30,000 discretionary cash bonus in 2008. In August 2009, in accordance with the Company's pay-for-performance plan, Mr. Steinhart received a base salary increase to \$218,500, effective as of March 1, 2009. Mr. Steinhart was awarded a discretionary bonus of \$10,000 in December of 2009. In May 2010, in accordance with the Company's pay-for-performance plan, Mr. Steinhart received a base salary increase to \$221,800, effective as of March 1, 2010. Mr. Steinhart was awarded a discretionary bonus of \$10,000 in 2010. In 2010, Mr. Steinhart also received an option grant for the purchase of 16,500 shares of our common stock at an exercise price of \$6.38, the closing price on the day of the grant, with vesting as follows: 4,125 shares vest annually over a period of five years and 12,375 shares vest upon placement of the first 200 MelaFind® commercial systems.

Based on its own internal analysis, the compensation committee concluded that Mr. Steinhart's total compensation for 2010 fit within the Company's overall objectives and philosophy with respect to executive compensation.

Vice President, Commercialization, Tina Cheng-Avery

Our Vice President of Commercialization, Ms. Cheng-Avery, joined us in February 2008. Ms. Cheng-Avery's initial compensation, including base salary and stock option package, was primarily based upon such factors as her prior business experience and the Company's overall compensation philosophy. Ms. Cheng-Avery was entitled to an annual base salary of \$200,000, and is eligible for a discretionary bonus equal to 25% of her annual base salary upon the attainment of certain to be determined goals. The Company also granted Ms. Cheng-Avery an option to purchase up to 80,000 shares of the Company's common stock at an exercise price of \$4.40 per share. In accordance with our policy, these options were priced at the closing price on the date of grant as determined by the compensation committee. As is consistent throughout our executive ranks, Ms. Cheng-Avery's options vest both over time and with the attainment of several corporate-wide milestones, as follows: 12,500 options vested immediately upon hiring; 12,500 options vesting annually over a period of four years; 25,000 options vesting upon the first commercial sale of MelaFind®; and 30,000 options vesting upon the Company achieving profitability. In August 2009, in accordance with the Company's pay-for-performance plan, Ms. Cheng-Avery received a base salary increase to \$207,000, effective as of March 1, 2009, and was awarded a discretionary bonus of \$30,000. In May 2010, in accordance with the Company's pay-for-performance plan, Ms. Cheng-Avery received a base salary increase to \$210,150, effective as of March 1, 2010, and was awarded a discretionary bonus of \$10,000.

Based on its own internal analysis, the compensation committee concluded that Ms. Cheng-Avery's total compensation for 2010 fit within the Company's overall objectives and philosophy with respect to executive compensation.

Vice President, Research and Development, Nikolai Kabelev

Our Vice President, Research and Development, Nikolai Kabelev, receives an annual base salary and a discretionary cash bonus. In 2007, Mr. Kabelev also received a stock option grant for the purchase of 19,239 shares of common stock at \$4.50 per share. In accordance with our policy, these options were priced at the closing price on the date of grant as determined by the compensation committee. Mr. Kabelev's options vest upon the attainment of the following corporate-wide milestones: 4,239 shares vest when MelaFind® software is verified, 5,000 shares vest when the PMA for MelaFind® is filed, 5,000 shares vest upon successful completion of the FDA audit, and 5,000 shares vest upon the FDA's approval of our PMA application for MelaFind®. Effective March 1, 2008, and in accordance with the Company's pay-for-performance plan, Mr. Kabelev's base salary increased to \$178,500 and he received a \$20,000 discretionary cash bonus in 2008. In August 2009, in accordance with the Company's pay-for-performance plan, Mr. Kabelev received a base salary increase to \$185,500, effective as of March 1, 2009, and was awarded a discretionary bonus of \$20,000. In May 2010, in accordance with the Company's pay-for-performance plan, Mr. Kabelev received a base salary increase to \$190,000, effective as of March 1, 2010, and was awarded a discretionary bonus of \$10,000. In 2010, Mr. Kabelev also received an option grant for the purchase of 25,000 shares of our common stock at an exercise price of \$6.38, the closing price on the day of the grant, with vesting as follows: 6,250 shares vest annually over a period of five years and 18,750 shares vest upon placement of the first 200 MelaFind® commercial systems.

Based on its own internal analysis, the compensation committee concluded that Mr. Kabelev's total compensation for 2010 fit within the Company's overall objectives and philosophy with respect to executive compensation.

Vice President, Operations, Christiano Butler

Our Vice President, Operations, Christiano Butler, joined us in May 2006. Mr. Butler's initial compensation, including base salary and stock option package, was primarily based upon such factors as his considerable relevant prior business experience and the Company's overall compensation philosophy. In 2006, Mr. Butler received a stock option grant consisting of 40,000 shares of common stock at an exercise price of \$7.60 per share. In accordance with our policy, these options were priced at the closing price on the date of grant as determined by the compensation committee. As is consistent throughout our executive ranks, Mr. Butler's options vest both over time and with the attainment of several corporate-wide milestones, as

follows: 2,000 options vested immediately upon hiring; 8,000 options vesting annually over a period of four years, 15,000 shares vesting upon the completion of the pivotal trial of MelaFind®, and 15,000 shares vesting upon the FDA's approval of our PMA application for MelaFind®. In 2007 Mr. Butler received a stock option grant of 10,000 shares of common stock at an exercise price of \$4.50 per share, priced on the date of grant as determined by the compensation committee. These options vest upon the attainment of the following corporate-wide milestones: 5,000 shares vesting upon the delivery of the first commercial version of MelaFind® and 5,000 shares vesting upon the delivery of manufacturing targets for MelaFind®. Effective March 1, 2008, and in accordance with the Company's pay-for-performance plan and for the additional responsibilities commensurate with his promotion to Vice President, Operations, Mr. Butler's base salary was increased to \$160,200 and he received a \$17,500 discretionary cash bonus for 2008. In August 2009, in accordance with the Company's pay-for-performance plan, Mr. Butler received a base salary increase to \$165,400, effective as of March 1, 2009, and was awarded a discretionary bonus of \$20,000. In addition, in August 2009 Mr. Butler received a stock option grant of 12,000 shares of common stock at an exercise price of \$7.54, priced on the date of the grant as determined by the compensation committee. Of these options, 4,000 have vested and the remaining 8,000 will vest in increments of 4,000 shares each on commercial launch of MelaFind® and on placement of one hundred commercial MelaFind® systems. In May 2010, in accordance with the Company's pay-for-performance plan, Mr. Butler received a base salary increase to \$175,000, effective as of March 1, 2010. Mr. Butler was awarded a discretionary bonus of \$10,000 in 2010. In 2010, Mr. Butler also received an option grant for the purchase of 7,500 shares of our common stock at an exercise price of \$6.38, the closing price on the day of the grant, with vesting as follows: 1,875 shares vest annually over a period of five years and 5,625 shares vest upon placement of the first 200 MelaFind® commercial systems.

Based on its own internal analysis, the compensation committee concluded that Mr. Butler's total compensation for 2010 fit within the Company's overall objectives and philosophy with respect to executive compensation. Mr. Butler has since resigned as an executive officer of the Company effective January 3, 2011.

GRANTS OF PLAN-BASED AWARDS FOR YEAR ENDED DECEMBER 31, 2010

The following table sets forth each grant of an award made to a named executive officer during our fiscal year ended December 31, 2010 under our 2005 Plan.

<u>Name and Principal Position</u>	<u>Grant Date</u>	<u>2005 Plan Milestone Option Awards: Number of Securities Underlying Options (#)</u>	<u>Grant Date Fair Value of Option Awards (\$)</u>	<u>Exercise or Base Price of Option (\$)</u>
Richard I. Steinhart, Vice President, CFO	5/13/2010	16,500	76,064	6.38
Nikolai Kabelev Vice President, R&D	5/13/2010	25,000	115,253	6.38
Christiano Butler Vice President, Operations(1)	5/13/2010	7,500	34,576	6.38

(1) Mr. Butler resigned as an executive officer of the Company effective January 3, 2011.

OUTSTANDING EQUITY AWARDS AT 2010 FISCAL YEAR-END

The following table sets forth the equity awards outstanding at December 31, 2010 for each of the named executive officers.

Name and Principal Position	Number of Securities Underlying Unexercised Options that are Exercisable (#)	Number of Securities Underlying Unexercised Options that are Unexercisable (#)	Equity Incentive Plan Awards Number of Securities Underlying Unexercised / Unearned Options (#)	Option Exercise Price (\$)	Option Expiration Date
Joseph V. Gulfo, M.D., President and Chief Executive Officer	270,000	630,000(1)		3.75	10/10/18
Richard I. Steinhart, Vice President Finance, Chief Financial Officer	80,000	20,000(2) 16,500(8)		5.82 6.38	4/24/11 5/13/20
Tina Cheng-Avery, Vice President Commercialization	18,750	61,250(3)		4.40	2/25/13
Nikolai Kabelev, Vice President, Research and Development	1,875 2,886			1.00 1.00	2/19/12 1/15/13
	60,000	25,000(8) 30,000(4)		6.38 7.08	5/13/20 5/22/11
	14,239	5,000(5)		4.50	11/29/12
Christiano Butler, Vice President Operations(9)	25,000 10,000 4,000	15,000(6) 8,000(7) 7,500(8)		7.60 4.50 7.54 6.38	5/30/11 11/29/12 8/13/14 5/13/20

- (1) 540,000 shares vest upon the Company receiving FDA approval of its PMA application for MelaFind®, and 180,000 shares vest in four equal annual installments. 45,000 shares vest on each of October 10, 2011 and October 10, 2012.
- (2) 20,000 shares vest at the time of the FDA's approval of our PMA application for MelaFind®.
- (3) 3,125 shares vest on each of February 25, 2011 and February 25, 2012; 25,000 shares vest upon the first commercial sale of MelaFind® and 30,000 shares vest upon corporate wide profitability.
- (4) 30,000 shares vest upon the FDA's approval of our PMA application for MelaFind®.
- (5) 5,000 shares vest upon the FDA's approval of our PMA application for MelaFind®.
- (6) 15,000 shares vest upon the FDA's approval of our PMA application for MelaFind®.
- (7) These shares vest 4,000 shares on commercial launch and 4,000 shares on the completion of the first 100 commercial systems of MelaFind®.
- (8) Vesting for these grants: 5% of grant shares vest on each of May 13, 2011, May 13, 2012, May 13, 2013, May 13, 2014 and May 13, 2015 and 75% of grant shares vest on placement of first 200 commercial systems of MelaFind®.
- (9) Mr. Butler resigned as an executive officer of the Company effective January 3, 2011.

OPTION EXERCISE AND VESTED STOCK OPTION AWARDS FOR OUR 2010 FISCAL YEAR

None of our named executive officers exercised any equity awards during the fiscal year ended December 31, 2010.

Severance Benefits

The only named executive officers who are entitled to receive severance benefits payable by the Company are Joseph V. Gulfo, M.D. and Richard I. Steinhart.

Joseph V. Gulfo, M.D.

If Dr. Gulfo is terminated without cause, he would be entitled to his then current monthly salary for a period of 15 months and, if Dr. Gulfo is then covered by health insurance provided by us, the cost to Dr. Gulfo of COBRA coverage for 15 months. If we elect not to renew Dr. Gulfo's employment agreement, Dr. Gulfo is entitled to an amount equal to his then current base salary for nine months and, if Dr. Gulfo is covered by our health insurance policy at such time, the cost of COBRA for nine months (subject to reduction to the extent Dr. Gulfo received comparable benefits from a subsequent employer during such nine-month period). Dr. Gulfo's severance period may be extended for an additional 12 months in the event we elect to extend the length of his non-compete covenant to two years, in which case we would have to pay him additional severance equal to twelve months of his base salary at the time of termination and his most recent bonus.

Assuming a termination date of December 31, 2010:

- if Dr. Gulfo was terminated by us for cause, upon death or disability, then he would not have received severance under his employment agreement;
- if Dr. Gulfo terminated his contract for good reason or was terminated by us without cause, then he would have received \$392,000 which represents 15 months of his monthly salary. Dr. Gulfo was not covered by our health insurance policy as of December 31, 2010, therefore, he would not be entitled to any COBRA coverage under his employment agreement;
- if Dr. Gulfo was terminated by us without cause within 30 days of our operations being discontinued, then he would not have received severance under his employment agreement;
- if Dr. Gulfo's employment agreement was not renewed by us, then he would have received \$235,200 which represents 9 months of his monthly salary. Dr. Gulfo was not covered by our health insurance policy as of December 31, 2010, therefore, he would not be entitled to any COBRA coverage under his employment agreement; and
- if Dr. Gulfo's employment agreement was not renewed by us and we extended the length of his non-compete covenant to two years, then he would have received \$705,600 which represents 27 months of his monthly salary plus \$150,000 which represents the amount of his last bonus. Dr. Gulfo was not covered by our health insurance policy as of December 31, 2010, therefore, he would not be entitled to any COBRA coverage under his employment agreement.

Richard I. Steinhart

If Mr. Steinhart is terminated without cause, he is entitled to 6 months of his base salary and acceleration of his milestone-based options if the milestones are achieved within six months of his termination.

Assuming a termination date of December 31, 2010:

- if Mr. Steinhart was terminated by us for cause, then he would not have received severance under his employment agreement; and
- if Mr. Steinhart was terminated by us without cause, then he would have received \$110,900 which represents 6 months of his monthly salary. Mr. Steinhart is also entitled to income from the acceleration of the vesting of his unvested stock options assuming that PMA approval of MelaFind® was received

within 6 months of his termination. Acceleration of the vesting of Mr. Steinhart's 20,000 options shares due to vest upon FDA approval of MelaFind® would not have resulted in a gain as his option was 'under water' at December 31, 2010.

Retirement Plans

We do not maintain a traditional defined benefit plan. We do, however, maintain a SIMPLE IRA plan covering all qualified employees. We match dollar-for-dollar the employee's contribution up to 3% of each participant's salary. We do not consider the SIMPLE IRA matching contribution to be a significant portion of any of our executives' compensation package.

Change of Control

Our 2003 Plan and 2005 Plan contain provisions providing that if there is a change of control involving a merger, consolidation, mandatory share exchange or other similar business combination of the Company with or into any other entity or any transaction in which a successor entity acquires all the issued and outstanding capital stock of the Company, or all or substantially all the assets of the Company, then, if and to the extent that outstanding options are not assumed or replaced with substantially equivalent options in connection with the acquisition event, each optionee shall have the right to exercise in full all of his or her outstanding options, whether or not such options are otherwise vested or exercisable, and any outstanding options which are not exercised prior to the consummation of the change of control event may be settled for cash or the terms of the option otherwise adjusted as the compensation committee determines.

Perquisites and Other Benefits

As a company without any substantial revenue, we are not in a position to provide any significant perquisites or other benefits. Currently, the only perquisite provided to Dr. Gulfo is a monthly stipend of \$3,000 which is intended to cover commutation expenses, home office expenses and certain communication expenses. We have no plans for any additional perquisites.

Compensation of Directors

In addition to reimbursement of expenses incurred in attending meetings of our Board of Directors and committees of our Board of Directors, for 2010 our non-employee directors received an annual fee of \$15,000 for serving as directors and an additional \$500 per meeting for each full board or committee meeting attended, whether in person or by telephone. In addition, the chairman of each of our compensation committee, our audit committee and our nominating committee received an additional annual fee of \$10,000. Also in December 2010, each of our non-employee directors received an annual stock option grant to purchase up to 7,500 shares of common stock in respect of their service as directors for that year. Such stock options will vest in full upon the first anniversary of issuance and have an exercise price equal to the closing price of our common stock on the date of the grant. As an employee of the Company, Dr. Gulfo received no additional compensation for his services as a director.

NON-EMPLOYEE DIRECTOR COMPENSATION TABLE FOR YEAR ENDED DECEMBER 31, 2010

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$)	Option Awards Outstanding (#)	All Other Compensation (\$)	Total (\$)
Sidney Braginsky	26,167	18,790(1)	30,000		44,957
Breaux Castleman	28,500	18,790(1)	30,000	24,000(2)	71,290
George Chryssis	19,500	18,790(1)	30,000		38,290
Martin Cleary	29,500	18,790(1)	30,000		48,290
Anne Egger	18,000	18,790(1)	15,000	53,040(3)	89,840
Dan W. Lufkin(5)	9,833	18,790(1)	22,500		28,623
Charles Stiefel(6)	17,500	18,790(1)	7,500		36,290
Gerald Wagner, Ph.D.	18,000	18,790(1)	129,500	30,000(4)	66,790

- (1) Represents Black-Sholes value of 7,500 shares option grants with one-year vesting awarded in 2010 to each non-employee director of the Company.
- (2) Represents Mr. Castleman's 2010 consulting fees related to obtaining FDA approval of MelaFind®, financial reporting and our business and financial strategy.
- (3) Represents Ms. Egger's 2010 consulting fees relating to the commercialization of MelaFind®.
- (4) Represents Dr. Wagner's 2010 consulting fees related to obtaining FDA approval of MelaFind®, and certain technical and competitive matters.
- (5) Mr. Lufkin did not seek reelection to our Board on Directors at the 2010 Annual Meeting. Mr. Lufkin has served as Director Emeritus of the Company since April 2010, for which he receives no compensation
- (6) Mr. Stiefel resigned from our Board of Directors in February 2011.

Employment Agreements***Joseph V. Gulfo, M.D.***

On January 5, 2004, we entered into an employment agreement with Dr. Joseph V. Gulfo, our President and Chief Executive Officer. Pursuant to the agreement, Dr. Gulfo is required to devote substantially all of his business time, attention and efforts to the performance of his duties under the agreement. The contract automatically renews for successive twelve-month terms unless either party sends a written notice of termination within 90 days of the expiration of the renewal term. The employment agreement has automatically been extended until December 31, 2011.

The employment agreement provides Dr. Gulfo with an annual base salary subject to periodic review by our Board of Directors, stock options, and performance bonuses. The target for such bonuses is 50% of Dr. Gulfo's then current base salary. Dr. Gulfo's employment agreement also provided for three separate grants of stock options, one of which was subsequently cancelled and replaced in October 2008 (see Overall Compensation — *President and Chief Executive Officer, Joseph V. Gulfo, M.D.*). In addition, Dr. Gulfo is entitled to a monthly stipend of \$3,000 which is intended to cover commutation expenses, home office expenses and certain communication expenses.

If Dr. Gulfo's employment is terminated by us without cause or Dr. Gulfo resigns for good reason, then Dr. Gulfo would be entitled to receive severance pay equal to 15 months of his then current base salary and, if Dr. Gulfo is then covered by health insurance provided by us, the cost to Dr. Gulfo of COBRA coverage for 15 months. If we elect not to renew Dr. Gulfo's employment agreement, Dr. Gulfo is entitled to an amount equal to his then current base salary for nine months and, if Dr. Gulfo is covered by our health insurance policy at such time, the cost of COBRA for nine months (subject to reduction to the extent Dr. Gulfo received comparable benefits from a subsequent employer during such nine-month period).

Dr. Gulfo is subject to a non-compete covenant upon termination of his employment by us or him. The term of Dr. Gulfo's non-compete covenant is one year, which in the event we terminate his employment without cause can be extended to two years if we elect to pay him additional severance equal to twelve months of his base salary at the time of termination and his most recent bonus (if any).

Limitation of Liability and Indemnification of Directors and Officers

Our Charter and Bylaws provide that we will indemnify our directors and executive officers and may indemnify our other officers and employees and other agents to the fullest extent permitted by law. In addition, we maintain directors' and officers' liability insurance. We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and executive officers.

Compensation Committee Interlocks and Insider Participation

The compensation committee is composed of three non-employee directors: Messrs. Castleman and Wagner and Ms. Egger. No member of the compensation committee is or was an officer or employee of the Company, other than Mr. Wagner who served as our acting Chief Operating Officer from January 2006 to January 2007. No interlocking relationship exists between the Company's Board of Directors or compensation committee and the Board of Directors or compensation committee of any other company, nor has such interlocking relationship existed in the past. None of our executive officers has served as a member of the compensation committee, or other committee serving an equivalent function, of any other entity, one of whose executive officers served as a member of our compensation committee.

REPORT OF THE COMPENSATION COMMITTEE OF THE BOARD OF DIRECTORS ON EXECUTIVE COMPENSATION*

The compensation committee of the Board of Directors has reviewed and discussed the Compensation Discussion and Analysis with the Company's management, and based on such review and discussions, the compensation committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Proxy Statement.

COMPENSATION COMMITTEE:

Breaux Castleman
Anne Egger
Gerald Wagner

* The material in this report is not "soliciting material," is not deemed "filed" with the SEC and is not to be incorporated by reference into any filing of the Company under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

CERTAIN TRANSACTIONS

Consulting Agreement with Breaux Castleman

In June 2003, we entered into a consulting agreement with Breaux Castleman for consulting services related to FDA approval of MelaFind®, administrative matters, financial reporting, and our business and financial strategy. Under this agreement, Mr. Castleman receives compensation for each month of services rendered. During 2003, Mr. Castleman was paid at the rate of \$8,000 for each month of services rendered and thereafter from 2004 onward he has been paid at the rate of \$2,000 for each month of services rendered. We made payments pursuant to this consulting agreement of \$99,000 in 2008, \$24,000 in 2009 and \$24,000 in 2010. Our consulting agreement with Mr. Castleman is terminable by either party on 30 days' written notice.

Consulting Agreement with Gerald Wagner, Ph.D.

Pursuant to a consulting agreement dated as of June 1, 2005 with Gerald Wagner Consulting LLC ("GWC"), a company owned and operated by Dr. Gerald Wagner, GWC agreed to direct our MelaFind® product development efforts and oversee the manufacturing process for MelaFind®. On March 24, 2006, we entered into an amended and restated consulting agreement with GWC, which became effective on April 1, 2006. Under this amended and restated consulting agreement, we agreed to pay GWC the annual amount of \$180,000 payable monthly over the term of the agreement. The agreement provided for termination at the option of GWC or us, at any time by providing thirty (30) days prior written notice or immediately upon the mutual agreement of us and GWC. In connection with GWC's ongoing engagement as a consultant, Dr. Wagner received a stock option grant of 50,000 shares of our common stock which vested in January 2007 upon commencement of the pivotal trial for MelaFind®. In addition, on March 24, 2006, Dr. Wagner received another stock option grant of 49,500 shares of our common stock which vested immediately upon grant. The exercise price for these two stock option grants is the closing price per share of our common stock on the option grant date. In addition, Dr. Wagner transitioned out of his role as our Acting Chief Operating Officer, and signed an amended consulting contract with us. Under the terms of the amended contract, Dr. Wagner is paid a monthly retainer of \$2,500 for his services, plus \$2,500 per day for each day of consulting in excess of one day per month. This amended agreement will end at the option of Dr. Wagner or us at any time, by providing fifteen days prior written notice, or immediately upon the mutual agreement of us and Dr. Wagner. In 2006, Dr. Wagner received \$180,000 from us for his role as our Acting Chief Operating Officer. In January 2007, Dr. Wagner received \$15,000 for his work as our Acting Chief Operating Officer and over the balance of 2007 he received \$30,000 as a consultant to us under his amended contract. During 2008, 2009 and 2010, Dr. Wagner received \$70,000, \$30,000, and 30,000 respectively, as a consultant to us under his contract.

Consulting Agreement with Anne Egger

In March 2009, we entered into a consulting agreement with Anne Egger for consulting services primarily focusing on physician advocacy. The agreement was for an initial term of three months and has subsequently been extended to run through September 2011. The agreement may be terminated by either party upon 30 days' written notice. Under the terms of the agreement, Ms. Egger is entitled to receive a consulting fee of \$1,600 per day. In 2009, and 2010, Ms. Egger received \$71,300 and \$53,050 as a consultant under her contract.

Review, Approval or Ratification of Transactions with Related Persons

Our Board of Directors reviews any related party transaction. In considering related party transactions, our Board is guided by its fiduciary duty to our stockholders. Our Board of Directors does not have any written or oral policies or procedures regarding the review, approval and ratification of transactions with related parties.

HOUSEHOLDING OF PROXY MATERIALS

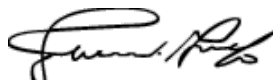
The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for proxy statements and annual reports with respect to two or more stockholders sharing the same address by delivering a single proxy statement addressed to those stockholders. This process, which is commonly referred to as “householding,” potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are Company stockholders will be “householding” our proxy materials. A single proxy statement may be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that it will be “householding” communications to your address, “householding” will continue until you are notified otherwise or until you notify your broker or the Company that you no longer wish to participate in “householding.” If, at any time, you no longer wish to participate in “householding” and would prefer to receive a separate proxy statement and annual report in the future you may (1) notify your broker, (2) direct your written request to: MELA Sciences, Inc., 50 South Buckhout Street, Suite 1, Irvington, New York 10533, Attention: Secretary, telephone (914) 591-3783 or (3) contact our Investor Relations representatives at Lazar Partners, Ltd., 420 Lexington Avenue, Suite 442, New York, New York 10170. Stockholders who currently receive multiple copies of the proxy statement at their address and would like to request “householding” of their communications should contact their broker. In addition, the Company will promptly deliver, upon written or oral request to the address or telephone number above, a separate copy of the annual report and proxy statement to a stockholder at a shared address to which a single copy of the documents was delivered.

OTHER MATTERS

The Board of Directors knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on such matters in accordance with their best judgment.

By Order of the Board of Directors



Joseph V. Gulfo, M.D.
President and Chief Executive Officer

March 24, 2011

A copy of the Company’s Annual Report to the Securities and Exchange Commission on Form 10-K for the year ended December 31, 2010 is available without charge upon written request to: MELA Sciences, Inc., 50 South Buckhout Street, Suite 1, Irvington, New York 10533, Attention: Secretary.

MELA Sciences, Inc.

Electronic Voting Instructions

**You can vote by Internet or telephone!
Available 24 hours a day, 7 days a week!**

Instead of mailing your proxy, you may choose one of the two voting methods outlined below to vote your proxy.

VALIDATION DETAILS ARE LOCATED BELOW IN THE TITLE BAR.

Proxies submitted by the Internet or telephone must be received by 11:59 p.m., EDT, on April 28, 2011.

Vote by Internet

- Log on to the Internet and go to <http://proxy.georgeson.com/>
- Follow the steps outlined on the secured website.

Vote by telephone

- Call toll free **877-456-7915** within the USA, US territories & Canada any time on a touch tone telephone. There is **NO CHARGE** to you for the call.
- Follow the instructions provided by the recorded message.

Using a **black ink** pen, mark your votes with an **X** as shown in this example. Please do not write outside the designated areas.



Annual Meeting Proxy Card

IF YOU HAVE NOT VOTED VIA THE INTERNET OR TELEPHONE, FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE.

The Board recommends a vote **FOR** all nominees, **FOR** Proposals 2 and 3 and every **3 Years** for Proposal 4.

<p>1. Nominees:</p> <table border="0"> <tr> <td style="text-align: right;">For</td> <td style="text-align: center;">Withhold</td> <td style="width: 100px;"></td> <td style="text-align: right;">For</td> <td style="text-align: center;">Withhold</td> <td style="width: 100px;"></td> <td style="text-align: right;">For</td> <td style="text-align: center;">Withhold</td> </tr> <tr> <td>01 - Joseph V. Gulfo, M.D.</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> <td>02 - Breau Castleman</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> <td>03 - Sidney Braginsky</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> </tr> <tr> <td>04 - George C. Chryssis</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> <td>05 - Martin D. Cleary</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> <td>06 - Anne Egger</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> </tr> <tr> <td>07 - Gerald Wagner, Ph.D.</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	For	Withhold		For	Withhold		For	Withhold	01 - Joseph V. Gulfo, M.D.	C	C	02 - Breau Castleman	C	C	03 - Sidney Braginsky	C	C	04 - George C. Chryssis	C	C	05 - Martin D. Cleary	C	C	06 - Anne Egger	C	C	07 - Gerald Wagner, Ph.D.	C	C							<table border="0"> <tr> <td style="text-align: right;">For</td> <td style="text-align: center;">Against</td> <td style="text-align: center;">Abstain</td> <td style="width: 100px;"></td> <td style="text-align: right;">For</td> <td style="text-align: center;">Against</td> <td style="text-align: center;">Abstain</td> </tr> <tr> <td>2. To ratify the selection of EisnerAmper LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2011</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> <td>3. To approve, by non-binding vote, the Company's executive compensation</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> </tr> <tr> <td></td> <td style="text-align: center;">1 Year</td> <td style="text-align: center;">2 Years</td> <td style="text-align: center;">3 Years</td> <td style="text-align: center;">Abstain</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4. To recommend, by non-binding vote, the frequency of advisory votes on executive compensation</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C</td> <td></td> <td></td> <td></td> </tr> </table>	For	Against	Abstain		For	Against	Abstain	2. To ratify the selection of EisnerAmper LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2011	C	C	C	3. To approve, by non-binding vote, the Company's executive compensation	C	C	C		1 Year	2 Years	3 Years	Abstain				4. To recommend, by non-binding vote, the frequency of advisory votes on executive compensation	C	C	C	C			
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Change of Address — Please print new address below, if applicable.

Please sign exactly as your name appears hereon. If the stock is registered in the names of two or more persons, each should sign. Executors, administrators, trustees, guardians and attorneys-in-fact should add their titles. If signer is a corporation, please give full corporate name and have a duly authorized officer sign, stating title. If signer is a partnership, please sign in partnership name by authorized person.

Date (mm/dd/yyyy) — Please print date below.

/ /

Signature 1 — Please keep signature within the box.

Signature 2 — Please keep signature within the box.

IF YOU HAVE NOT VOTED VIA THE INTERNET OR TELEPHONE, FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE.

Proxy — MELA Sciences, Inc.

**PROXY SOLICITED BY THE BOARD OF DIRECTORS
FOR THE ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON APRIL 29, 2011**

The undersigned hereby appoints Breaux Castleman, Joseph V. Gulfo, M.D., and Richard I. Steinhart, and each of them (with full power to act alone), as attorneys and proxies of the undersigned, with full power of substitution, to vote all shares of stock of MELA Sciences, Inc. which the undersigned may be entitled to vote at the Annual Meeting of Stockholders of MELA Sciences, Inc. to be held at The Courtyard By Marriott Hotel, 475 White Plains Road, Tarrytown, New York 10591, on Friday, April 29, 2011 at 9:00 a.m., local time, and at any and all postponements, continuations and adjournments thereof, with all powers that the undersigned would possess if personally present, upon and in respect of the following matters and in accordance with the following instructions, with discretionary authority as to any and all other matters that may properly come before the meeting.

UNLESS A CONTRARY DIRECTION IS INDICATED, THIS PROXY WILL BE VOTED FOR ALL NOMINEES LISTED IN PROPOSAL 1, FOR PROPOSAL 2, FOR PROPOSAL 3, AND EVERY 3 YEARS FOR PROPOSAL 4, AS MORE SPECIFICALLY DESCRIBED IN THE PROXY STATEMENT. IF SPECIFIC INSTRUCTIONS ARE INDICATED, THIS PROXY WILL BE VOTED IN ACCORDANCE THEREWITH.

CONTINUED AND TO BE SIGNED ON REVERSE SIDE