

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
SCHEDULE 14A**

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

Filed by the Registrant

Filed by a 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 Rule 14a-12

MEDICINOVA, INC.

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

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

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(4) Proposed maximum aggregate value of transaction:

(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:



April 29, 2011

Dear Stockholder:

You are cordially invited to attend the Annual Meeting of Stockholders of MediciNova, Inc. The meeting will be held on Tuesday, June 14, 2011, at 3:00 p.m. Pacific Daylight Time at the Northern Trust Tower, 4370 La Jolla Village Drive, Suite 210, San Diego, California 92122.

With this letter we have enclosed a copy of our Annual Report to Stockholders for the fiscal year ended December 31, 2010, Notice of Annual Meeting of Stockholders, Proxy Statement and proxy card. These materials provide further information concerning our Annual Meeting. If you would like another copy of the Annual Report, please send your request to MediciNova, Inc., 4350 La Jolla Village Drive, Suite 950, San Diego, California 92122, Attention: Investor Relations, and one will be mailed to you. It is also available on our Internet site at www.medicinova.com.

After reading the Proxy Statement, please mark, date, sign and return the enclosed proxy to ensure that your shares will be represented. WE CANNOT ENSURE THAT YOUR SHARES WILL BE VOTED UNLESS YOU SIGN, DATE AND RETURN THE ENCLOSED PROXY SO THAT IT IS RECEIVED BY JUNE 10, 2011, OR YOU ATTEND THE ANNUAL MEETING IN PERSON. Your vote is important, so please return your proxy promptly.

The Board of Directors and management look forward to seeing you at the meeting.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Yuichi".

Yuichi Iwaki, M.D., Ph.D.
President, Chief Executive Officer and Director



**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD JUNE 14, 2011**

To the Stockholders of MediciNova, Inc.:

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of MediciNova, Inc., a Delaware corporation, or MediciNova, will be held on Tuesday, June 14, 2011, at 3:00 p.m. Pacific Daylight Time at the Northern Trust Tower, 4370 La Jolla Village Drive, Suite 210, San Diego, California 92122 for the following purposes:

1. To elect one Class I director to serve until the 2014 Annual Meeting of Stockholders and until his successor has been duly elected and qualified unless he resigns or is removed;
2. To ratify the appointment of KPMG LLP as MediciNova's independent registered public accounting firm for the fiscal year ending December 31, 2011; and
3. To transact such other business as may properly come before the Annual Meeting and any adjournment or postponement of the Annual Meeting.

Stockholders of record as of the close of business on April 19, 2011 are entitled to notice of, and to vote at, the Annual Meeting and any adjournment or postponement thereof. A complete list of stockholders entitled to vote at the Annual Meeting will be available for inspection at MediciNova's offices, located at 4350 La Jolla Village Drive, Suite 950, San Diego, California 92122, for ten days prior to the meeting.

It is important that your shares are represented at the Annual Meeting. Even if you plan to attend the meeting in person, we hope that you will mark, sign and date the enclosed proxy and return it promptly so that it is received by June 10, 2011. This will not limit your right to attend or vote at the meeting.

By Order of the Board of Directors,

Yuichi Iwaki, M.D., Ph.D.
President, Chief Executive Officer and Director

San Diego, California
April 29, 2011

MEDICINOVA, INC.
4350 LA JOLLA VILLAGE DRIVE, SUITE 950
SAN DIEGO, CALIFORNIA 92122

**PROXY STATEMENT FOR THE ANNUAL MEETING OF
STOCKHOLDERS TO BE HELD JUNE 14, 2011**

What is this document?

This document is the Proxy Statement of MediciNova, Inc., a Delaware corporation, for the Annual Meeting of Stockholders to be held at 3:00 p.m., Pacific Daylight Time, on Tuesday, June 14, 2011. A form of proxy card is included. This document and the form of proxy card are first being mailed or given to stockholders on or about May 13, 2011.

We refer to our company throughout this document as “we,” “us,” the “Company” or “MediciNova.”

Why I am receiving this document?

You are receiving this document because you were one of our stockholders of record as of the close of business on April 19, 2011, the record date for our Annual Meeting, or the Record Date. We are sending this document and the form of proxy card to solicit your proxy to vote upon certain matters at the Annual Meeting.

When and where is the Annual Meeting being held, and who may attend?

The Annual Meeting is scheduled to be held on Tuesday, June 14, 2011, at 3:00 p.m. Pacific Daylight Time at the Northern Trust Tower, 4370 La Jolla Village Drive, Suite 210, San Diego, California 92122, as well as any adjournment or postponement thereof. Only stockholders, their proxy holders and our invited guests may attend the meeting. If a broker, bank or other nominee holds your shares in street name, please bring a copy of the account statement reflecting your ownership as of April 19, 2011 so that we may verify your status as a stockholder and have you check in at the registration desk for the meeting. For security reasons, we also may require photo identification for admission. If you would like directions to the meeting, please send your request to MediciNova, Inc., 4350 La Jolla Village Drive, Suite 950, San Diego, California 92122, Attention: Investor Relations.

What is a proxy, and who is paying the costs to prepare this document and solicit my proxy?

A proxy is your legal designation of another person to vote your shares of our common stock, par value \$0.001 per share, or the Common Stock. The document that designates someone as your proxy is also called a proxy or a proxy card.

We will pay all expenses of this solicitation, including the cost of preparing and mailing this Proxy Statement and the form of proxy card.

Who is soliciting my proxy and will anyone be compensated to solicit my proxy?

Your proxy is being solicited by and on behalf of our Board of Directors, or the Board. In addition to solicitation by use of the mails, proxies may be solicited by our officers and employees in person or by personal interview, telephone, electronic mail, facsimile transmission or other means of communication. Our officers and employees will not be additionally compensated, but they may be reimbursed for out-of-pocket expenses in connection with any solicitation. We also may reimburse custodians, nominees and fiduciaries for their expenses in sending proxies and proxy material to beneficial owners.

Who is entitled to vote at the Annual Meeting?

Only holders of shares of our Common Stock as of the Record Date are entitled to vote at the Annual Meeting. As of the close of business on the Record Date, we had 15,280,990 shares of our Common Stock outstanding.

How many votes do I have, and can I cumulate my vote?

You have one vote for each share of our Common Stock that you held as of the Record Date. Cumulative voting is not allowed.

How many votes must be present to hold the Annual Meeting?

A quorum must be present at the Annual Meeting for any business to be conducted. A quorum exists when the holders of a majority of the 15,280,990 shares of our Common Stock outstanding as of the Record Date are present in person or by proxy at the Annual Meeting. If we do not have a quorum, we will be forced to reconvene the Annual Meeting at a future date.

How may I vote my shares?

You may vote your shares of our Common Stock at the Annual Meeting either in person or by proxy. To vote by proxy, you must mark, date, sign and mail the enclosed proxy. Giving a proxy will not affect your right to vote your shares if you attend the Annual Meeting and want to vote in person. The shares represented by the proxies received in response to this solicitation and not properly revoked will be voted at the Annual Meeting in accordance with the instructions therein.

What am I voting on?

You will be asked to vote on the following:

- the election of one Class I director;
- the ratification of the appointment of our independent registered public accounting firm for 2011; and
- such other business that may properly come before the meeting.

How many votes are needed to elect directors and ratify the appointment of our accounting firm?

Directors are elected by a plurality vote of the votes cast by the holders of shares of our Common Stock entitled to vote at the Annual Meeting. A plurality vote means that the directors who receive the most votes in an election, though not necessarily a majority, will be elected.

The ratification of the appointment of KPMG LLP as our independent registered public accounting firm will be decided by the affirmative vote of a majority of the shares present in person or represented by proxy at the Annual Meeting and entitled to vote on such proposal.

May other matters be raised at the Annual Meeting; how will the meeting be conducted?

We currently are not aware of any business to be acted upon at the Annual Meeting other than the three matters described above. Under Delaware law and our governing documents, no other business aside from procedural matters may be raised at the Annual Meeting unless proper notice has been given to us by the stockholders. If other business is properly raised, your proxies have authority to vote as they think best, including to adjourn the meeting.

We have broad authority to conduct the Annual Meeting so that the business of the meeting is carried out in an orderly and timely manner. In doing so, we have broad discretion to establish reasonable rules for discussion,

comments and questions during the meeting. We are also entitled to rely upon applicable law regarding disruptions or disorderly conduct to ensure that the Annual Meeting proceeds in a manner that is fair to all participants.

How are abstentions and broker non-votes counted?

Abstentions are included in the determination of shares present for quorum purposes. Because abstentions represent shares entitled to vote on any matter presented for shareholder approval, the effect of an abstention will be the same as a vote against a proposal. Shares represented by broker non-votes will be counted in determining whether there is a quorum present but will not be counted as votes either in favor or against a particular proposal.

If my shares are held by my broker in street name, will my broker vote my shares for me?

If you are the beneficial owner of shares held in “street name” by a broker, your broker is the record holder of the shares. The broker, however, is required to vote those shares in accordance with your instructions. If you do not give instructions to your broker, your broker may exercise discretionary voting power to vote your shares with respect to routine matters, but the broker may not exercise discretionary voting power to vote your shares with respect to “non-routine” items. In the case of non-routine items, the shares that cannot be voted by your broker would be treated as “broker non-votes.” At the Annual Meeting, only the ratification of the appointment of KPMG LLP is a routine item for which your broker may exercise discretionary voting power.

How will my proxy be voted?

The individuals named on the proxy card will vote your proxy in the manner you indicate on the proxy card. If your shares are not held in street name and you return your proxy but do not mark your voting preference, the individuals named as proxies will vote your shares: (i) **FOR** the election of the one nominee for Class I director to serve until the 2014 Annual Meeting of Stockholders and until his successor is duly elected and qualified; and (ii) **FOR** the ratification of the appointment of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2011.

If your shares are held in street name and you do not mark your voting preference on “Proposal One: Election of Director,” your shares will not be voted and the shares become broker non-votes as to the particular proposal. If your shares are held in street name and you return your proxy but do not mark your voting preference, the bank, broker or other nominee has the authority to vote your unvoted shares on “Proposal Two: Ratification of Appointment of Independent Registered Public Accounting Firm.” If the bank, broker or other nominee does not vote your unvoted shares on this proposal, the shares become “broker non-votes” as to the particular proposal.

We encourage you to provide voting instructions. This ensures your shares of Common Stock will be voted at the Annual Meeting in the manner you desire.

Can I change my mind and revoke my proxy?

Yes. To revoke a proxy given in response to this solicitation, you must:

- attend the Annual Meeting and vote in person;
- submit a written notice of revocation to us prior to or at the Annual Meeting; or
- submit another proxy of a later date that is properly executed prior to or at the Annual Meeting.

Will my vote be confidential?

Yes. We will continue our practice of keeping the votes of all stockholders confidential. Stockholder votes will not be disclosed to our directors, officers, employees or agents, except:

- as necessary to meet applicable legal requirements;
- in a dispute regarding authenticity of proxies and ballots;

- in the case of a contested proxy solicitation, if the other party soliciting proxies does not agree to comply with the confidential voting policy; or
- when a stockholder makes a written comment on the proxy card or otherwise communicates the vote to management.

How can I find out the results of the voting at the annual meeting?

Preliminary voting results will be announced at the meeting. In addition, final voting results will be published in a current report on Form 8-K that we expect to file within four business days after the annual meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

Where is our common stock traded?

Our common stock is traded and quoted on the Nasdaq Global Market, or Nasdaq, under the symbol “MNOV” and on the Jasdaq Market of the Osaka Stock Exchange under the code “4875.”

IMPORTANT

Please mark, sign and date the enclosed proxy and return it promptly so that it is received by June 10, 2011 to ensure that your shares can be voted, whether or not you intend to be present at the Annual Meeting. This will not limit your rights to attend or vote in person at the Annual Meeting.

MATTERS TO BE CONSIDERED AT THE ANNUAL MEETING

PROPOSAL ONE:

ELECTION OF CLASS I DIRECTOR

General

The Board currently consists of five members divided into three classes, each serving staggered three-year terms as follows:

- Class I, whose term will expire at the Annual Meeting;
- Class II, whose term will expire at the Annual Meeting of Stockholders to be held in 2012; and
- Class III, whose term will expire at the Annual Meeting of Stockholders to be held in 2013.

The Class I member of the Board is scheduled for election at the Annual Meeting. The Nominating and Corporate Governance Committee of the Board has recommended, and the Board has designated, Jeff Himawan, Ph.D., who is an incumbent director, to be elected as the Class I director at the Annual Meeting. If elected at the Annual Meeting, the Class I director will hold office until the Annual Meeting of Stockholders in 2014 and until his successor has been duly elected and qualified unless he resigns or is removed. If Dr. Himawan is unable or declines to serve as a director at the time of the Annual Meeting, proxies will be voted for any nominee designated by the Board, taking into account a recommendation by the Nominating and Corporate Governance Committee, if any, to fill the vacancy.

Election of one Class I director will require the affirmative vote of a plurality of the shares present and voting at the Annual Meeting in person or by proxy.

Biographical Information

Biographical information concerning the Class I director nominee as of the date of this Proxy Statement is set forth below.

<u>Name</u>	<u>Served as Director Since</u>	<u>Age</u>	<u>Principal Business Experience</u>
Jeff Himawan, Ph.D.	2006	46	<i>Jeff Himawan, Ph.D.</i> has served as a director since January 2006 and became Chairman of the Board of Directors in March 2007. Dr. Himawan is a Managing Director of Essex Woodlands Health Ventures, L.P., which he joined in 2001. Essex Woodlands Health Ventures and its affiliates own approximately 8% of our outstanding Common Stock. Prior to joining Essex Woodlands Health Ventures, Dr. Himawan was Managing Director and Co-founder of Seed-One Ventures, LLC. Prior to Seed-One Ventures, he was a scientist in academic and industrial settings. Dr. Himawan also served as a member of the Board of Iomai Corporation (now Intercell USA, Inc.) from 2002 to 2007. Dr. Himawan holds a B.S. in biology from the Massachusetts Institute of Technology and a Ph.D. in biological chemistry and molecular pharmacology from Harvard University. Based on his background in corporate finance and capital raising and his extensive experiences in the biotechnology industry, the Board believes Dr. Himawan has the appropriate set of skills to serve as a member of our Board.

Biographical information concerning each of the Class II directors as of the date of this Proxy Statement, who will serve until the 2012 Annual Meeting of Stockholders, is set forth below.

<u>Name</u>	<u>Served as Director Since</u>	<u>Age</u>	<u>Principal Business Experience</u>
Yuichi Iwaki, M.D., Ph.D.	2000	61	<i>Yuichi Iwaki, M.D., Ph.D.</i> is our founder and served as the chairman of the Board of Directors from our inception in September 2000 to March 2007, becoming Executive Chairman in July 2005, Acting Chief Executive Officer as of September 2005 and President and Chief Executive Officer as of March 2006. From September 2001 until January 2007, Dr. Iwaki also served as our consultant in connection with financing transactions and business development activities. Dr. Iwaki was a member of the Board of Avigen, Inc. from 1994 to 2008. He holds three professorships at the University of Southern California School of Medicine in the Departments of Urology, Surgery and Pathology and has been Director of the Transplantation Immunology and Immunogenetic Laboratory since 1992. Dr. Iwaki is also a visiting professor at the Nihon University School of Medicine and Kyushu University. Prior to joining the faculty at the University of Southern California School of Medicine, Dr. Iwaki held professorships at the University of Pittsburgh School of Medicine in the Departments of Surgery and Pathology from 1989 through 1991. Dr. Iwaki received both his M.D. and Ph.D. degrees from Sapporo Medical School in Sapporo, Japan. Dr. Iwaki is the author of more than 200 peer-reviewed publications and more than 40 book chapters. Dr. Iwaki has been advising pharmaceutical companies and venture capital funds regarding research and investment strategies for over 25 years and serves on the board of directors of several biotechnology companies. Based on his medical background, relationships with leading Japanese biotechnology companies and extensive experiences as a professor and as an advisor to pharmaceutical companies, the Board believes Dr. Iwaki has the appropriate set of skills to serve as a member of our Board.
Hiroaki Shigeta	2009	68	Hiroaki Shigeta has served as a director since September 2009. Mr. Shigeta has served as a director of The Medicines Company, a company listed on The NASDAQ Stock Market, Inc., since April 2007. Mr. Shigeta served as a consultant to The Medicines Company from July 2006 to December 2007. From January 2005 until June 2006, he served as a consultant to various Japanese pharmaceutical companies. From October 1993 to December 2004, Mr. Shigeta served in a variety of senior management positions with Hoffman-La Roche, Inc. and its affiliates. From January 2003 to December 2004, Mr. Shigeta was the U.S. Head, Far East Relations of Hoffman-La Roche and from June 2002 to April 2003, he was a Member of the Board of Chugai Seiyaku KK, Tokyo, a majority-owned

<u>Name</u>	<u>Served as Director Since</u>	<u>Age</u>	<u>Principal Business Experience</u>
			affiliate of Roche Holding of Switzerland. From January 2001 to May 2002, Mr. Shigeta served as Chairman and Representative Director of Nippon Roche KK, a pharmaceutical company and a Japanese affiliate of Roche Holding of Switzerland. From October 1993 to December 2000, Mr. Shigeta was the President and Chief Executive Officer of Nippon Roche KK. Mr. Shigeta received a B.A. in economics from Momoyama Gakuin University in Osaka, Japan and a B.S. from Haas Business School, University of California at Berkeley. Based on his relationships with leading Japanese biotechnology companies and extensive experience as a consultant and senior manager of various pharmaceutical companies, the Board believes Mr. Shigeta has the appropriate set of skills to serve as a member of our Board.

Biographical information concerning each of the Class III directors as of the date of this Proxy Statement, who will serve until the 2013 Annual Meeting of Stockholders, is set forth below.

<u>Name</u>	<u>Served as Director Since</u>	<u>Age</u>	<u>Principal Business Experience</u>
Arlene Morris	2006	59	<i>Arlene Morris</i> has served as a director since May 2006. Ms. Morris brings significant expertise in the establishment of strategic partnerships, marketing and operations to us. Ms. Morris resigned in January 2011 as President and Chief Executive Officer of Affymax, Inc., a Nasdaq-listed biotechnology company. Ms. Morris had held this position since her appointment in June 2003. From 2001 to 2003, she served as the President and Chief Executive Officer of Clearview Projects, Inc. Prior to that, Ms. Morris served from 1996 to 2001 as the Senior Vice President, Business Development for Coulter Pharmaceutical Inc. Previously, she was the Vice President of Business Development at Scios, Inc. from 1993 to 1996, where she completed several high profile transactions, including one of the first biotech profit-sharing deals for a late-stage product. From 1977 through 1993, Ms. Morris held various management and executive positions at Johnson & Johnson in sales, marketing, new product development and business development, holding the position of Vice President of Business Development for McNeil Pharmaceutical from 1988 to 1993. She received her B.A. degree in Biology and Chemistry from Carlow College and studied marketing at Western New England College. Ms. Morris also serves on the board of directors of BIO, the Biotechnology Industry Organization, Nuon Corporation and Affymax, Inc. Based on her extensive experience in the biotechnology industry, her prior leadership positions and her current senior management and board service, the Board believes Ms. Morris has the appropriate set of skills to serve as a member of our Board.

<u>Name</u>	<u>Served as Director Since</u>	<u>Age</u>	<u>Principal Business Experience</u>
John K.A. Prendergast, Ph.D.	2004	57	<i>John K.A. Prendergast, Ph.D.</i> has served as a director since September 2004. Since 1993, Dr. Prendergast has served as President of SummerCloud Bay Inc., an independent consulting firm providing services to the biotechnology industry. Dr. Prendergast is a co-founder and currently serves as chairman of the board of directors of Palatin Technologies, Inc., an NYSE Amex Equities-listed biopharmaceutical company. He is also currently serving as chairman of the board of directors of AVAX Technologies, Inc., an over-the-counter traded biotechnology company, and as the executive chairman of the board of directors and chief executive officer of Antyra, Inc., a privately held biopharmaceutical company. Prior to our acquisition of Avigen, Inc., or Avigen, Dr. Prendergast served as a member of the Board of Avigen from 1992 to 2009. Dr. Prendergast received B.Sc., M.Sc. and Ph.D. degrees from the University of New South Wales, Sydney, Australia and a C.S.S. in Administration and Management from Harvard University. Based on his extensive experience in the biotechnology industry, his prior leadership positions and his current board service at other biotechnology companies, the Board believes Dr. Prendergast has the appropriate set of skills to serve as a member of our Board.

The Board recommends a vote “FOR” election of Dr. Himawan as a Class I Director.

Director Independence

The Board believes that a majority of the Board members should consist of independent directors. The Board also believes that it is useful and appropriate to have one or more members of management, including the President and Chief Executive Officer, serve as directors. The Board has determined that each of Dr. Himawan, Ms. Morris, Dr. Prendergast and Mr. Shigeta is an independent director as defined by the Nasdaq Marketplace Rule 5605(a)(2). The Board has also determined that each of the members of our Audit Committee is “independent” for purposes of Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and Nasdaq Marketplace Rule 5605(c)(2).

Nominations for Directors

The Board has as an objective that its membership be composed of experienced and dedicated individuals with diversity of experience, perspectives and skills. The Nominating and Corporate Governance Committee has the responsibility to identify, evaluate, recruit and recommend qualified candidates to the Board for nomination or election. The Nominating and Corporate Governance Committee will select candidates for election as director based on their character, judgment, diversity of experience, business acumen and ability to act on behalf of all stockholders. The satisfaction of these criteria is implemented and assessed through ongoing consideration of the directors and nominees by the Nominating and Corporate Governance Committee and the Board. Based upon these activities and its review of the current composition of the Board and the director-nominee, the Nominating and Corporate Governance Committee and the Board believe that these criteria have been satisfied.

The Nominating and Corporate Governance Committee believes that nominees for director should have relevant experience, such as experience in management or accounting and finance or industry and technology knowledge that may be useful to us and the Board, high personal and professional ethics and the willingness and ability to devote sufficient time to effectively carry out his or her duties as a director. Diversity in professional experience, skills and other individual qualities and attributes that contribute to Board heterogeneity are among the factors that the Nominating and Corporate Governance Committee typically takes into account and seeks to foster in identifying nominees so that members of the Board represent different viewpoints and backgrounds. The Nominating and Corporate Governance Committee believes it appropriate for a majority of the members of the Board to meet the definition of “independent director” under the Nasdaq Marketplace Rules. The Nominating and Corporate Governance Committee also believes it is appropriate for our President and Chief Executive Officer to serve as a member of the Board.

Prior to each annual meeting of stockholders, the Nominating and Corporate Governance Committee identifies nominees for director by first evaluating the current directors whose term will expire at the annual meeting and who are willing to continue in service. These candidates are evaluated based on the criteria described above, including as demonstrated by the candidate’s prior service as a director, and the needs of the Board with respect to the particular talents and experience of its directors. In the event that a director does not wish to continue in service, the Nominating and Corporate Governance Committee determines not to re-nominate a director, or a vacancy is created on the Board as a result of a resignation, an increase in the size of the Board or other event, the Nominating and Corporate Governance Committee will consider various candidates for Board membership, including those suggested by the Nominating and Corporate Governance Committee members, other Board members, members of management, any executive search firm engaged by the Nominating and Corporate Governance Committee and stockholders. Once a slate of candidates is chosen by the Nominating and Corporate Governance Committee, the Nominating and Corporate Governance Committee recommends the candidates to the entire Board, and the Board then determines whether to designate the slate to be elected at the annual meeting of stockholders.

The Nominating and Corporate Governance Committee evaluates any nominees recommended by stockholders in the same manner that potential nominees suggested by Board members, management or other parties are evaluated. A stockholder who wishes to suggest a prospective nominee for the Board should notify

any member of the Nominating and Corporate Governance Committee in writing with any supporting material the stockholder considers appropriate, which should be sent to our corporate headquarters at 4350 La Jolla Village Drive, Suite 950, San Diego, California 92122.

In addition, our Amended and Restated Bylaws, or the Bylaws, contain provisions that address the process by which a stockholder may nominate an individual to stand for election to the Board at the annual meeting of stockholders. In order to be considered, a recommendation for a candidate by a stockholder must be timely delivered in writing to us and otherwise comply with the provisions of the Bylaws. The recommendation must include the following written information: the name, contact information and share ownership information for the candidate and the stockholder making the nomination and the citizenship information of the nominee and other information about the nominee that must be disclosed proxy solicitations under Section 14 of the Exchange Act and the related rules and regulations under that section. The Nominating and Corporate Governance Committee may also require any proposed nominee to furnish such other information as may reasonably be required by the Nominating and Corporate Governance Committee to determine the eligibility of such proposed nominee to serve as director. The recommendation should be sent to: Nominating and Corporate Governance Committee, MediciNova, Inc., 4350 La Jolla Village Drive, Suite 950, San Diego, California 92122. You can obtain a copy of the Bylaws by writing to us at this address.

Board Leadership Structure and Risk Oversight Function of the Board

The Board recognizes that one of its key responsibilities is to evaluate and determine its optimal leadership structure so as to provide independent oversight of management. The Board understands that there is no single, generally accepted approach to providing Board leadership and that Board leadership structure may vary as circumstances warrant. The leadership structure of our Board currently consists of an independent Chairman of the Board who oversees the Board and works closely with our Chief Executive Officer regarding Board matters. Our Chairman, Dr. Himawan, does not serve as our Chief Executive Officer as we believe this structure enhances the independence of our Board. Each of our Board committees is chaired by Dr. Prendergast, an independent director, who reports to the full Board on the activities and decisions made by the committees. We believe this leadership structure, with separate roles of Chairman and Chief Executive Officer and the same independent director chairing all of our committees, helps to facilitate efficient decision-making and communication among our directors.

Subject to active oversight by the Board, our management is primarily responsible for managing the risks we face in the ordinary course of operating our business. Our Board receives operations and strategic presentations from management, which presentations include discussions of the principal risks to our business. In addition, the Board has delegated certain risk oversight functions to each of its committees. The Audit Committee assists the Board in risk oversight functions related to specific areas such as treasury management, equity administration and contracts policy. The Audit Committee also reviews and discusses with management our system of disclosure controls and procedures and our internal controls over financial reporting. The Compensation Committee assists the Board in risk oversight functions related to our compensation policies and programs and employee retention issues. The Nominating and Corporate Governance Committee assists the Board in risk oversight functions related to important compliance matters, including periodic reviews of the Code of Ethics and Code of Business Conduct to ensure compliance with applicable securities laws and regulations and stock market rules. We believe that this leadership structure enhances our efficiency in fulfilling our oversight functions with respect to our business and facilitates division of risk management oversight responsibilities among the full Board, each of its committees and our management team.

Communications

If you wish to communicate with the Board, you may send your communication in writing to: Chairman of the Board of Directors, MediciNova, Inc., 4350 La Jolla Village Drive, Suite 950, San Diego, California 92122, who will forward all material communications received to the appropriate director or directors or committee of the Board based on the subject matter. You must include your name and address in the written communication and indicate whether you are a stockholder of us.

Code of Ethics and Code of Business Conduct

We have adopted a Code of Ethics for Senior Officers for the Chief Executive Officer, President, Chief Financial Officer and key management employees (including other senior financial officers) who have been identified by the Board. We also have adopted a Code of Business Conduct that applies to employees, consultants, representatives, officers and directors. Each of the Code of Ethics for Senior Officers and Code of Business Conduct may be found under the Investor Relations-Corporate Governance section of our website at www.medicinova.com. We will post on our website (i) any waiver, if and when granted, to any provision of the Code of Ethics for Senior Officers or Code of Business Conduct (for executive officers or directors) and (ii) any amendment to the Code of Ethics for Senior Officers or Code of Business Conduct.

Legal Proceedings

We may be involved in certain legal actions and claims from time to time arising in the ordinary course of business. Historically the outcome of such other litigation and claims has not had a material adverse effect on our financial condition or results of operations.

MEETINGS AND COMMITTEES OF THE BOARD

Board Meetings and Committees

The Board held 9 meetings during the year ended December 31, 2010. All of our directors attended at least 75% of the aggregate number of meetings of the Board and of the committees on which such directors serve. We encourage, but do not require, our directors to attend the annual meetings of stockholders. In 2010, Dr. Iwaki was the only director then serving on the Board to attend the annual meeting.

Independent Directors and Audit Committee

The members of the Audit Committee of the Board each meet the independence standards established by the U.S. Securities and Exchange Commission, or the SEC, and Nasdaq for audit committees. Although each member of the Audit Committee has been selected by the Board based on its determination that the Audit Committee members are fully qualified to monitor the performance of management, the public disclosures by us of our financial condition and results of operations, our internal control over financial reporting and the performance of our independent registered public accounting firm, as well as to analyze and evaluate our financial statements, the Board has determined that none of the members of the Audit Committee qualifies as an “audit committee financial expert” as such term is defined in the rules and regulations of the SEC. The Board has determined that it is appropriate for the Audit Committee not to have an “audit committee financial expert” at this time because our financial statements are not overly complex given the current stage of its development and we do not currently have any revenue. However, the Board believes that Dr. Prendergast, Chairman of the Audit Committee, does fulfill the requirements of Nasdaq’s Marketplace Rule 5605(c)(2), which requires at least one Audit Committee member have past employment experience in finance or accounting that results in the individual’s financial sophistication.

Board Committees and Charters

The Board has three standing committees: the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee. The Nominating Committee determines the composition of these committees. Each member of these committees is an independent director in accordance with the rules and regulations of the SEC and the Nasdaq Marketplace Rules. Each committee is governed by a written charter approved by the Board. A copy of each charter can be found under the Investor Relations-Corporate Governance section of our website at www.medicinova.com. The number of members, names of current members, number of meetings held during the last fiscal year and functions of each committee are set forth below:

Audit Committee

Number of Members: Three

Members: Dr. Prendergast (Chairman)
Ms. Morris
Mr. Shigeta

Number of Meetings: 7

Functions: The Audit Committee assists the Board in fulfilling its legal and fiduciary obligations in matters involving our accounting, auditing, financial reporting, internal control and legal compliance functions by approving the services performed by our independent registered public accounting firm and reviewing its reports regarding our consolidated financial statements and system of internal accounting control over financial reporting. The Audit Committee is responsible for the appointment, compensation, retention and oversight of our independent registered public accounting firm and for ensuring that such firm is independent of management.

Compensation Committee

Number of Members:

Three

Members:

Dr. Prendergast (Chairman)
Dr. Himawan
Ms. Morris

Number of Meetings:

5

Functions:

The Compensation Committee determines our general compensation policies and practices. The Compensation Committee also reviews and approves compensation packages for our officers and, based upon such review, recommends overall compensation packages for the officers to the Board. In addition, the Compensation Committee reviews and determines equity-based compensation for our directors, officers, employees and consultants and administers our stock option and employee stock purchase plans.

Nominating and Corporate Governance Committee

Number of Members:

Three

Members:

Dr. Prendergast (Chairman)
Dr. Himawan
Mr. Shigeta

Numbers of Meetings:

2

Functions:

The Nominating and Corporate Governance Committee is responsible for making recommendations to the Board regarding candidates for directorships and the size and composition of the Board and for overseeing our corporate governance guidelines and reporting and making recommendations to the Board concerning corporate governance matters.

Compensation Committee Interlocks and Insider Participation

Dr. Prendergast has served as a member of the Compensation Committee since such committee was formed in September 2004 in anticipation of our initial public offering. Ms. Morris has served as a member of the Compensation Committee since her election to the Board in 2006. Dr. Himawan has served as a member of the Compensation Committee since January 2010. No member of the Compensation Committee at any time has been one of our officers or employees. No interlocking relationship exists, or has existed in the past, between the Board or Compensation Committee and the board of directors or compensation committee of any other entity.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

We have entered into indemnification agreements with each of our executive officers and directors. In addition, our executive officers and directors are indemnified under the General Corporation Law of the State of Delaware and the Bylaws to the fullest extent permitted under Delaware law. We also have a directors' and officers' liability insurance policy that insures our directors and officers against the cost of defense, settlement or payment of a judgment under certain circumstances.

Our Audit Committee is charged with the responsibility of reviewing certain issues involving potential conflicts of interest, and reviewing and approving all related party transactions, including those required to be disclosed as a "related party" transaction under applicable federal securities laws. Our Audit Committee has not adopted any specific procedures for conducting such reviews and considers each transaction in light of the specific facts and circumstances presented. The Audit Committee approved the consulting agreement between MediciNova and Danerius, LLC, an affiliate of Alan W. Dunton, one of our former directors, dated June 12, 2009, as amended September 23, 2009, pursuant to which Danerius provided consulting services to MediciNova related to its product development programs at a rate of \$27,500 per month. We terminated the agreement with Danerius in November 2010 and Dr. Dunton resigned as a director in January 2011. In 2010, no other transaction requiring disclosure under applicable federal securities laws was submitted to the Audit Committee for approval as a "related party" transaction.

**PROPOSAL TWO:
RATIFICATION OF APPOINTMENT OF
INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

Dismissal of Ernst & Young LLP

On September 29, 2009, the Audit Committee approved the dismissal of Ernst & Young LLP, or E&Y, as our independent registered public accounting firm.

During the interim period through September 29, 2009, there were no disagreements (as defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions to Item 304 of Regulation S-K) with E&Y on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of E&Y, would have caused E&Y to make reference to the subject matter of the disagreements in its reports on the Company's financial statements for such years. During the interim period through September 29, 2009, there were no reportable events (as defined in Item 304(a)(1)(v) of Regulation S-K). We provided E&Y with a copy of this report and E&Y furnished us with a letter dated October 2, 2009, addressed to the Securities and Exchange Commission, stating it agrees with the statements made above.

Engagement of KPMG LLP

On September 29, 2009, the Audit Committee approved the engagement of KPMG LLP, or KPMG, as our independent registered public accounting firm. The Audit Committee has selected KPMG as our independent registered public accounting firm for the fiscal year ending December 31, 2011. A representative of KPMG is expected to be present at the Annual Meeting to respond to questions and will have the opportunity to make a statement if he or she desires to do so. Although stockholder ratification of our independent registered public accounting firm is not required by the Bylaws or otherwise, we are submitting the selection of KPMG to the stockholders for ratification to permit stockholders to participate in this important corporate decision.

Before September 29, 2009, neither we nor anyone on our behalf consulted with KPMG with respect to (a) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on our consolidated financial statements, and neither a written report was provided to us nor oral advice was provided that KPMG concluded was an important factor considered by us in reaching a decision as to the accounting, auditing or financial reporting issue; or (b) any matter that was either the subject of a disagreement (as defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions) or a reportable event (as described in Item 304(a)(1)(v) of Regulation S-K).

Principal Accountant Fees and Services

The following table presents fees for professional audit services paid by us for professional services rendered by KPMG for the fiscal year ended December 31, 2010 and 2009.

	Fiscal Year Ended	
	December 31,	
	2010	2009
Audit Fees (1)	\$306,535	\$94,000
Tax Fees (2)	—	—
Other Fees (3)	113,628	—
Total	<u>\$420,163</u>	<u>\$94,000</u>

(1) Audit fees consisted of fees paid for professional services for the audit of our financial statements and services normally provided by independent registered public accounting firms in connection with statutory and regulatory filings or engagements and includes a report on internal controls in 2010.

- (2) KPMG did not render professional services for federal, state or international tax compliance.
- (3) Other fees consisted of fees paid for professional services related to registration statements and other miscellaneous services.

Determination of Independence

The Audit Committee has considered whether the provision of non-audit related services is compatible with maintaining the independence of KPMG LLP and has determined that the provision of such services is compatible with maintaining the independence of our auditors. To date, KPMG LLP has not provided non-audit services to us.

Pre-Approval Policy and Procedures

It is our policy that all audit and non-audit services to be performed by our independent registered public accounting firm be approved in advance by the Audit Committee. The Audit Committee will not approve the engagement of our independent registered public accounting firm to perform any service that such firm would be prohibited from providing under the rules and regulations of the SEC and the applicable Nasdaq Marketplace Rules. In assessing whether to approve use of our independent registered public accounting firm for permitted non-audit services, the Audit Committee tries to minimize relationships that could impair the objectivity of such firm. The Audit Committee will approve permitted non-audit services by our independent registered public accounting firm only when it will be more effective or economical to have such services provided by such firm and where the nature of the services will not impair such firm's independence. During the fiscal years ended December 31, 2010 and 2009, all audit and non-audit services performed by our independent registered public accounting firm were approved in advance by the Audit Committee or the Board.

Required Vote

Ratification will require the affirmative vote of a majority of the shares present and voting at the Annual Meeting in person or by proxy. In the event ratification is not obtained, the Audit Committee will review its future selection of our independent registered public accounting firm but will not be required to select a different independent registered public accounting firm for us.

The Board recommends a vote "FOR" ratification of appointment of KPMG LLP as our independent registered public accounting firm.

EXECUTIVE OFFICERS

The following table sets forth certain information, as of the date of this Proxy Statement, regarding each of our executive officers who is not also currently serving as a director or being nominated to serve as a director.

<u>Name</u>	<u>Position</u>	<u>Age</u>	<u>Principal Business Experience</u>
Michael Coffee	Chief Business Officer and Interim Chief Financial Officer	65	<i>Michael Coffee</i> joined MediciNova in June 2010 at which time he was appointed Chief Business Officer. In February 2011, following the resignation of Mr. Asako as Chief Financial Officer, Mr. Coffee was appointed Interim Chief Financial Officer. He previously was Senior Vice President, Sales and Marketing for Adamas Pharmaceuticals, Inc. from May 2009 to February 2010. From February 2005 to May 2009, Mr. Coffee was Chief Business Officer of Avigen, which was acquired by MediciNova in December 2009. Prior to joining Avigen, Mr. Coffee co-founded the Alekta Group, LLC, a consulting firm, in 2004 to provide a comprehensive range of pharmaceutical development consulting services to emerging pharmaceutical companies. From 2001 to 2004 Mr. Coffee served as President and Chief Operating Officer of Amarin Pharmaceuticals, Inc., the U.S. drug development and marketing subsidiary of Amarin Corporation PLC. Mr. Coffee also served as President and Chief Operating Officer of Elan Pharmaceuticals, North America from 1998 to 2001 and held marketing and executive management positions, including President and Chief Operating Officer, of Athena Neurosciences, Inc. between 1991 and 1998. Mr. Coffee received a B.S. in biology from Siena College and an Advanced Management degree from Amos Tuck School of Business.
Kirk Johnson, Ph.D.	Chief Scientific Officer	51	<i>Kirk Johnson, Ph.D.</i> joined MediciNova as a consultant in December 2009 and was appointed Chief Scientific Officer effective February 2010. Before joining MediciNova, Dr. Johnson served as Secretary of Avigen from March 2009 to December 2009. Dr. Johnson also held the positions of Vice President, Research and Development from December 2006 to December 2009 and Vice President, Preclinical Development from June 2004 to December 2006. Prior to joining Avigen in January 2004, Dr. Johnson served as Senior Director, Pharmacology & Preclinical Development and a member of the executive management team of Genesoft Pharmaceuticals, Inc. from 2001 to

<u>Name</u>	<u>Position</u>	<u>Age</u>	<u>Principal Business Experience</u>
			2004. From 1991 to 2001, Dr. Johnson performed research and development services in both protein and small molecule therapeutics at Chiron Corporation and ultimately served as Director, Pharmacology and Preclinical Research. Dr. Johnson was involved in leading IND-enabling programs, supporting clinical development, and contributing to successful IND and NDA filings at Chiron and Genesoft. In addition to general pharmacology and other preclinical development responsibilities, Dr. Johnson has led research and clinical development projects for diverse indications including neuropathic pain, hemophilia, antibacterials, diabetes, obesity, acute inflammation and cardiovascular disease. Dr. Johnson has published more than 50 manuscripts and holds four U.S. patents. Dr. Johnson holds a B.S. degree in toxicology from the University of California-Davis and a Ph.D. degree in pharmacology and toxicology from the Medical College of Virginia. He completed postdoctoral fellowships studying the mechanism of action of IL-2 from 1990-1991 at the University of California, Berkeley and from 1986-1989 at Dartmouth College.
Masatsune Okajima	Vice President and Head of Japanese Office	43	<i>Masatsune Okajima</i> was appointed as our Vice President and Head of Japanese Office in September 2006. Prior to joining us he served as Deputy General Manager at Daiwa Securities SMBC Co., Ltd. since 2002. From 1999 through 2002, Mr. Okajima served as Manager, Daiwa Securities SB Capital Markets Co., Ltd. (now Daiwa Securities SMBC Co., Ltd.). From 1996 to 1999, Mr. Okajima served as Manager, Sumitomo Capital Securities Co., Ltd. and between 1991 and 1996 Mr. Okajima served in various positions at Sumitomo Bank, Ltd. (now Mitsui Sumitomo Bank). Mr. Okajima received a B.S. degree from the Department of Science and Technology, Tokyo Science University.

EXECUTIVE COMPENSATION
Compensation Discussion and Analysis

Overview of Compensation Program

Our compensation program is designed to reward the achievement of corporate and individual objectives. These objectives focus on building a sustainable business that develops differentiated drugs to improve the health and quality of life of patients and creates value for our stockholders. This Compensation Discussion and Analysis provides a narrative overview of our executive compensation philosophy, programs and policies. It is intended to highlight significant information relating to our executive compensation programs and includes analysis of the compensation earned by our executive officers, all of which is qualified by the terms of the employment agreements and other compensation plans and arrangements that we have filed with the SEC. As of December 31, 2010, our executive officers were: Yuichi Iwaki, M.D., Ph.D., President and Chief Executive Officer; Shintaro Asako, CPA, Chief Financial Officer, Michael Coffee, Chief Business Officer, Masatsune Okajima, Vice President and Head of Japanese Office and Kirk Johnson, Ph.D., Chief Scientific Officer. Shintaro Asako resigned from his position as Chief Financial Officer on January 31, 2011. Subsequently, Michael Coffee was appointed Interim Chief Financial Officer. Dr. Johnson was appointed Chief Scientific Officer in February 2010.

The Compensation Committee presently consists of three independent directors. The Compensation Committee is responsible for developing and monitoring compensation arrangements for our executive officers, administering our stock award plans and other compensation plans and performing other activities and functions related to executive compensation as may be assigned from time to time by the Board.

Our compensation program is designed to attract, retain and reward executive officers and other key employees who contribute to our long-term success and to motivate those individuals to enhance long-term stockholder value. It is intended to reward the achievement of specific operating goals from year to year and of strategic goals over several years, and it rewards responses to our business challenges and opportunities which will increase the value of our stock over the long term. The evaluation of whether and to what extent the performance criteria are met by each of the executive officers in any given year is ultimately determined solely by the Compensation Committee.

Compensation Philosophy and Objectives

The Compensation Committee believes that compensation of our executive officers should encourage creation of stockholder value and achievement of strategic corporate objectives. It is the Compensation Committee's philosophy to align the interests of our stockholders and management by integrating compensation with our annual and long-term corporate strategic and financial objectives. Consequently, a significant portion of executive officer compensation is "at risk" and depends upon our corporate performance as well as each individual executive's performance against performance criteria established annually. In addition, to further enhance stockholder value and promote alignment of pay with our performance and stockholder interests, our compensation program includes a significant equity-based component. In order to attract and retain the most qualified personnel, we intend to offer a total compensation package competitive with companies in the biotechnology and pharmaceutical industries, taking into account relative company size, performance and geographic location as well as individual responsibilities and performance. We target base salary and overall compensation, which includes bonuses and equity-based compensation, at the 25th to 75th percentile of companies in our peer group, although individual variances may occur depending on an executive officer's experience, responsibilities and performance. We believe our compensation is competitive with that paid by companies in our peer group.

We generally intend to qualify executive compensation for deductibility without limitation under Section 162(m) of the Internal Revenue Code of 1986, as amended, or the Code. Section 162(m) of the Code provides that, for purposes of the regular income tax and the alternative minimum tax, the otherwise allowable deduction for compensation paid or accrued with respect to a covered employee of a publicly-held corporation

(other than certain exempt performance-based compensation) is limited to no more than \$1.0 million per year. We do not expect that the non-exempt compensation to be paid to any of our executive officers for fiscal 2011 as calculated for purposes of Section 162(m) of the Code will exceed the \$1.0 million annual limit.

Use of Compensation Consultants

In 2010, the Compensation Committee engaged Barney & Barney Inc., or Barney and Barney, to provide third-party data to assist the Compensation Committee in its formulation of compensation strategy for executive officers. Barney & Barney provided reports to the Compensation Committee in 2010, each of which outlined data with respect to the pay practices of our peer companies compiled by Barney & Barney. For purposes of our 2010 compensation determinations, our peer company group consisted of 21 biotechnology and pharmaceutical companies with clinical development programs in at least Phase II development, with revenues of less than \$20 million, employees less than 100, market capitalization less than \$250 million and in geographies with premium cost of living. These 21 companies were: Acadia Pharmaceuticals Inc.; Aastrom Biosciences Inc.; Anadys Pharmaceuticals, Inc.; Antigenics Inc.; Bidel, Inc.; Binovo; Celldex Therapeutics, Inc.; Curis Inc.; Cyclacel Pharmaceuticals, Inc.; Cytrx Corp.; Entremed Inc.; Molecular Insight Pharmaceuticals; Neurocrine; OncoGenex Pharmaceuticals; Oxigene Inc.; Palatin Technologies, Inc.; Sunesis Pharmaceuticals; Telik, Inc.; Threshold Pharmaceuticals, Inc.; Trubion Pharmaceuticals and Vical Incorporated. The reports Barney and Barney provided included comparable base cash compensation, incentive cash compensation and equity awards for our peer company group. While the Compensation Committee did not base its compensation decisions on such reports, its 2010 compensation determinations were informed by the data presented by Barney and Barney. The Compensation Committee has the sole authority to establish the nature and scope of engagement of any compensation consultant, to approve the payment of fees to any such consultant and to terminate any consultant's engagement. Barney and Barney also performs insurance brokerage services for the Company.

Roles of Executives in Establishing Compensation

The Compensation Committee meets regularly to consider all major elements of compensation, including the design and implementation of compensation and benefits programs. During 2010, Dr. Iwaki and Mr. Asako generally attended Compensation Committee meetings by invitation but were excused for executive sessions. At the Compensation Committee's request, Dr. Iwaki typically makes recommendations to the Compensation Committee concerning the salary, bonus and equity compensation to be granted to our other executive officers. The Compensation Committee may approve, modify or disapprove any of the recommendations made by Dr. Iwaki. The Compensation Committee determines the compensation (including bonus and option grants, if any) of Dr. Iwaki using the same criteria as for the other executive officers. Neither Dr. Iwaki nor Mr. Asako has a role in recommending or determining his own compensation.

Elements of Executive Compensation and Employment Agreements

The elements of compensation for executive officers are base salary, annual discretionary cash incentives, long-term equity incentives and additional benefits, some of which are available to most other employees, including a 401(k) plan, health and welfare insurance, and life insurance, some of which allocate payments generally based on an individual's level of annual cash compensation. In the case of Mr. Okajima, we pay a benefits adjustment of approximately \$16,700 each year, payable on a monthly basis, and contribute 50% of the premium costs for certain insurance, unemployment, pension and welfare programs, as required by Japanese law. Executive officers have substantial portions of their compensation at risk for annual and long-term performance, with the largest portion at risk for the most senior executive officers. In 2010, we reimbursed commuting expenses for Mr. Coffee and Dr. Johnson.

Each of our executive officers is party to an employment agreement that provides for an initial base salary that is subject to annual adjustment in an amount established and approved by the Compensation Committee. Each of these agreements also provides that the executive officer may receive incentive bonuses at the discretion of the Board. Pursuant to these agreements, each executive officer is required to devote his entire business time, attention, energies, skills, learning and best efforts to further our interests and may not engage in any outside

activities that compete in any way with our business. Following termination of employment of an executive officer, other than Mr. Okajima, with us, we also have the option to engage such executive officer as a consultant on a quarterly basis. Compensation for each quarter of consulting services would be equal to 15% of the executive officer's annual base salary in effect prior to such termination.

Executive Officer Base Salary

The Compensation Committee annually reviews salaries recommended by the Chief Executive Officer for executive officers other than the Chief Executive Officer and, based upon such review, approves salaries for such executive officers. The Compensation Committee sets the salary level of each executive officer on a case-by-case basis, taking into account both the individual's level of responsibilities and performance as well as our performance as a whole. The Compensation Committee also considers market information and the base salaries and other incentive compensation paid to executive officers of our peer companies.

The employment agreement with each executive officer sets an initial annual base salary, which was competitive in our industry given the executive's experience and qualifications at the time we entered into the agreement. The Compensation Committee annually reviews each executive officer's base salary and takes into consideration during this annual review a variety of factors, including:

- individual and corporate performance;
- levels of responsibility;
- prior experience;
- breadth of knowledge of the industry; and
- competitive pay practices in the biotechnology industry.

Based upon this analysis undertaken in January 2011, the Compensation Committee determined that executive officer salaries for 2011 would remain the same as the base salaries set by the Compensation Committee in early 2010 or, in the case of Mr. Coffee, in June 2010 in connection with his commencement of employment as Chief Business Officer.

- Dr. Iwaki's 2011 base salary remains \$490,060.
- Mr. Okajima's 2011 base salary remains \$285,000.
- Dr. Johnson's 2011 base salary remains \$285,000.
- Mr. Coffee's 2011 base salary remains \$300,000.

Mr. Asako resigned from his position as Chief Financial Officer on January 31, 2011. At the time of his resignation and during 2010, Mr. Asako's base salary was of \$285,000.

Executive Officer Annual Discretionary Cash Incentives

The Compensation Committee believes that a portion of each executive officer's compensation should be contingent upon (i) our performance in meeting corporate and financial objectives and (ii) the individual's contribution to our performance. For officers other than the Chief Executive Officer, the Compensation Committee evaluates each executive officer with the Chief Executive Officer to determine the bonus for the fiscal year, which is based on individual and corporate performance, taking into account economic and industry conditions.

Corporate and financial objectives for 2010 include successfully meeting financial, cash and budgetary goals, entering into a strategic collaboration for MN-166/AV411 and MN-221 and implementing a full time business development function. These objectives are challenging to meet but are goals the Compensation Committee believes can be attained. Our 2010 corporate objectives did not include minimum target and

maximum levels of performance with respect to each objective. However, to award any bonus, the Compensation Committee requires at least some progress towards achieving each of the objectives. Not all corporate objectives are quantifiable in that not all objectives included specific quantitative elements or quantitative weighting. Corporate and financial objectives related to strategic collaborations specified a minimum upfront payment of at least \$15 million.

In 2010, the Compensation Committee set the target bonus awards for our individual executive officers as a percentage of annual base salary. For Dr. Iwaki, the target bonus was set at 50% of base salary; and for Messrs. Asako, Okajima and Coffee, as well as Dr. Johnson, the target bonus was set at 35% of base salary. Dr. Iwaki's individual objectives for fiscal 2010 are the same as our corporate objectives. In the case of Messrs. Asako, Okajima and Coffee, as well as Dr. Johnson our corporate objectives have 75% weight and individual objectives have 25% weight in determining bonus eligibility for fiscal 2010.

Although executive bonuses for 2010 have not yet been approved or paid by the Compensation Committee, with the preliminary assessment of the achievement of corporate and financial objectives achieved through the filing of the fiscal year 2010 Annual report on Form 10-K, we have accrued a total of \$315,000 for management bonus as of March 31, 2011. Due to Mr. Asako's resignation in February 2011, he is not eligible to receive a bonus for his 2010 performance.

Our corporate objectives for fiscal 2011 include successfully meeting financial, cash and budgetary goals and entering into a strategic collaboration for MN-166/AV411 and MN-221. Dr. Iwaki's individual objectives for fiscal 2011 are the same as our corporate objectives. For Messrs. Coffee and Okajima and Dr. Johnson, their corporate objectives have 75% weight and their individual objectives have 25% weight in determining bonus eligibility for fiscal 2011. The Compensation Committee will evaluate corporate and individual achievement of the objectives during fiscal 2011 in early 2012 and will determine bonus amounts, if any, based upon such evaluation.

Stock Awards

The Compensation Committee administers our Amended and Restated 2004 Stock Incentive Plan, or the 2004 Plan, for executive officers, employees, consultants and non-employee directors, under which it grants stock options and other stock-based awards. The Compensation Committee believes that providing executive officers who have responsibility for our management and growth with an opportunity to increase their ownership of our stock better aligns the interests of our executive officers with those of our stockholders and promotes retention of key personnel, which is also in the best interest of our stockholders. Accordingly, the Compensation Committee, when reviewing executive officer compensation, also considers stock awards as appropriate. At its discretion, the Compensation Committee may also grant stock awards based on individual and corporate achievements from time to time. Grants made to the Chief Executive Officer and other executive officers are approved by the Compensation Committee and then, in certain cases, recommended for approval by the Compensation Committee to the entire Board. The Compensation Committee determines the number of shares of our Common Stock underlying each stock award based upon the executive officer's and our corporate performance, the executive officer's role and responsibilities, the executive officer's base salary and comparisons with comparable awards to and target equity participation for individuals in similar positions in the industry, the executive officer's prior stock awards and exercise price of outstanding awards, if any, and the overall level of outstanding stock awards as a percentage of total shares outstanding. No restricted stock or stock unit awards were made to our executive officers in 2010.

Stock Options

The Compensation Committee believes that total executive compensation should include a mix of short-term and long-term incentives. In general, stock options are granted early in the fiscal year to existing employees, including our executive officers and upon a new hire or promotion, and are subject to vesting over time, based on the individual's continued employment. Stock options granted in fiscal year 2010 vest monthly over a 48-month period commencing on the date of grant. In general, vested stock options may be exercised within ten years from the date the stock options were granted.

Upon a participant's termination of employment with MediciNova, stock option awards remain exercisable only in accordance with the following provisions:

- Upon termination by reason of death or disability, any vested stock options remain exercisable for twelve months after the date of termination; and
- Upon termination for any reason other than death or disability, any vested stock options remain exercisable for three months after the date of termination.

The Compensation Committee awarded stock options to our executive officers in January 2010 in the following amounts: Dr. Iwaki: an option to purchase 58,600 shares of Common Stock; Mr. Asako: an option to purchase 35,700 shares of Common Stock; and Mr. Okajima: an option to purchase 35,700 shares of Common Stock. In February 2010, the Compensation Committee awarded to Dr. Johnson an option to purchase 100,000 shares of Common Stock as a new hire grant in connection with his appointment to Chief Scientific Officer. In June 2010, Mr. Coffee was awarded an option to purchase 100,000 shares of Common Stock as a new hire grant in connection with his appointment as Chief Business Officer. The total value of stock options granted to the executive officers in 2010 was based on our Chief Executive Officer's recommendations and the Compensation Committee's own assessment of each individual's performance and experience. None of our current executive officers exercised any of his vested stock options in 2010. Mr. Asako resigned on January 31, 2011, and accordingly, his unvested stock options expired at such time and his vested but unexercised stock options will expire on May 1, 2011.

No stock options have been awarded to our executive officers, thus far, in 2011.

Severance Protection Agreements

In June 2007, the Compensation Committee, in an effort to retain key executive officers notwithstanding a change of control of us, recommended to the Board consideration of severance protection agreements, whereby the executive officers would be paid specified amounts and receive continued benefits if they were to be terminated following a change of control transaction or were to have their responsibilities and authority materially diminished following a change of control. The Compensation Committee believes that having these double-trigger arrangements in place can help us attract and retain key employees in a marketplace where these types of arrangements are commonly offered by our peer companies. We also believe that such arrangements in connection with terminations arising in conjunction with a change of control allow our executive officers to assess a potential change of control objectively, without regard to the potential impact of the transaction on their own job security. The form of the severance protection agreement, or the Severance Protection Agreement, was approved by the Board of Directors in September 2007, and its material terms are described in this Proxy Statement under the caption "Summary of Potential Payments Upon Termination or Change of Control." Each of our executive officers is a party to a Severance Protection Agreement.

Pursuant to Notice 2010-6 which was issued by the Internal Revenue Service in 2010 and pursuant to Unanimous Written Consent of the Compensation Committee in December 2010, the existing employment and severance protection agreements of our U.S.-based executives were updated in accordance with Section 409A of the Code to provide that the release must be returned within 60 days and that severance payments will commence on the date such release is effective, unless the 60 day period crosses two tax years, in which case payment will commence no earlier than the second tax year and that nonqualified deferred compensation payable on separation of service will be delayed for six months after the separation date.

The Compensation Committee did not consider the existence of the Severance Protection Agreements in determining salary or bonus or equity awards for fiscal 2010.

In connection with his resignation from his position as Chief Financial Officer on January 31, 2011, we entered into a separation agreement and release with Mr. Asako, or the Separation Agreement. The Separation Agreement provided for a lump sum payment of \$237,500 which equals the salary that Mr. Asako would have received through November 30, 2011. In addition, through November 30, 2011, the Company will pay the

applicable health insurance premiums to continue Mr. Asako's medical benefits in the same manner and at the same contribution rate in effect immediately prior to Mr. Asako's resignation, with the exception that such benefits may be terminated by the Company if and when Mr. Asako obtains substantially similar benefits through other employment. Mr. Asako has agreed to release the Company and certain related parties, including the Company's officers, directors and employees, from all claims and liabilities under federal and state laws arising prior to the date of Mr. Asako's resignation and has agreed to forego any bonus to which he may have been entitled for the fiscal year ended December 31, 2010. Under the terms of the Separation Agreement, Mr. Asako has also reaffirmed that he will continue to abide by the Proprietary Information and Inventions Agreement.

SUMMARY COMPENSATION TABLE

The following table summarizes all compensation for all services rendered in all capacities to us during each of the fiscal years ended December 31, 2010, December 31, 2009 and December 31, 2008 earned by each of our current executive officers and Mr. Asako.

Name and Position	Year	Salary (\$)	Bonus (\$)	Option Awards (\$ (1))	Non-Equity Incentive Plan Compensation (\$ (14))	All Other Compensation (\$)	Total (\$)
Yuichi Iwaki, M.D., Ph.D. (2). President and Chief Executive Officer	2010	490,060	—	254,300	—	14,700(3)	759,060
	2009	473,488	—	113,100	236,745	14,700(3)	838,033
	2008	464,205	—	309,400	139,261	13,800(4)	926,666
Michael Coffee (12) Chief Business Officer and Interim Chief Financial Officer	2010	164,286	—	301,400	—	28,823(13)	494,509
Masatsune Okajima (8) Vice President and Head of Japanese Office	2010	285,000	—	154,900	—	16,700(9)	456,600
	2009	248,585	—	47,850	100,000	16,713(9)	413,148
	2008	241,345	—	114,240	45,755	17,040(9)	418,380
Kirk Johnson, Ph.D. (10) Chief Scientific Officer	2010	261,250	—	434,000	—	68,552(11)	763,802
Shintaro Asako, CPA (5) Former Chief Financial Officer	2010	285,000	—	154,900	—	14,700(6)	454,600
	2009	243,296	—	69,600	100,000	14,700(6)	427,596
	2008	236,210	—	176,120	50,224	13,800(7)	476,354

- (1) Amounts in the Option Awards column reflect the grant date fair value as calculated in accordance with the Financial Accounting Standards Board's Accounting Standards Codification Topic 718 (formerly known as FAS 123R and referred to here as ASC 718). See Note 1, "The Company, Basis of Presentation and Summary of Significant Accounting Policies—Stock Based Compensation," in the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 for the relevant assumptions used to determine the valuation of awards.
- (2) Dr. Iwaki is being paid salary at an annual rate of \$490,060 in 2011.
- (3) Includes 401(k) employer matching contributions (\$14,700). Excludes long-term disability insurance and health insurance premiums, both of which are generally available to all employees on a non-discriminatory basis.
- (4) Includes 401(k) employer matching contributions (\$13,800). Excludes long-term disability insurance and health insurance premiums, both of which are generally available to all employees on a non-discriminatory basis.
- (5) Mr. Asako resigned from his position as Chief Financial Officer on January 31, 2011 and was paid \$237,500, which equals the salary that Mr. Asako would have received through November 30, 2011, in connection with his resignation.
- (6) Includes 401(k) employer matching contributions (\$14,700). Excludes long-term disability insurance and health insurance premiums, both of which are generally available to all employees on a non-discriminatory basis.
- (7) Includes 401(k) employer matching contributions (\$13,800). Excludes long-term disability insurance and health insurance premiums, both of which are generally available to all employees on a non-discriminatory basis.
- (8) Mr. Okajima is being paid salary at an annual rate of \$285,000 in 2011.
- (9) Includes a Japanese benefits adjustment as stipulated in Mr. Okajima's employment agreement.
- (10) Dr. Johnson was hired by MediciNova in February 2010 and is being paid salary at an annual rate of \$285,000 in 2011.
- (11) Includes 401(k) employer matching contributions (\$12,162) and amounts paid in connection with Dr. Johnson's commuting expenses (grossed-up) from his primary residence to MediciNova's corporate headquarters (\$56,390). Excludes long-term disability insurance and health insurance premiums, both of which are generally available to all employees on a non-discriminatory basis.
- (12) Mr. Coffee was hired by MediciNova in June 2010 and was appointed Interim Chief Financial Officer in February 2011. Mr. Coffee is being paid salary at an annual rate of \$300,000 in 2011.
- (13) Includes amounts paid in connection with Mr. Coffee's commuting expenses (grossed-up) from his primary residence to MediciNova's corporate headquarters (\$28,823). Excludes long-term disability insurance and health insurance premiums, both of which are generally available to all employees on a non-discriminatory basis.
- (14) As of March 31, 2011, we have accrued a total discretionary cash bonus pool for 2010 of \$315,000 based on the preliminary assessment of the achievement of corporate and financial objectives through the filing of the fiscal year 2010 Annual Report on Form 10-K. As of the date of this report, the Compensation Committee has not yet finalized its determination as to when these awards will be paid out. Target bonuses for 2010 were \$245,030 for Dr. Iwaki, \$99,750 for each of Messrs. Asako and Okajima and Dr. Johnson and \$105,000 for Mr. Coffee. In connection with his Separation Agreement, Mr. Asako has agreed to forego any bonus to which he may be entitled to for the 2010 fiscal year.

GRANTS OF PLAN BASED AWARDS

The following table discloses grants of stock awards during the fiscal year ended December 31, 2010 for each of our current executive officers and Mr. Asako.

Name and Position	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plans Awards (4)			All Other Option Awards: Number of Securities Underlying Options #	Exercise or Base Price of Option Awards \$/Sh. (1)	Grant Date Fair Value of Option Awards (2) (\$)
		Threshold \$	Target \$	Maximum \$			
Yuichi Iwaki, M.D., Ph.D. President and Chief Executive Officer	1/29/2010 —	— —	— 245,030	— —	58,600 —	7.34 —	254,300 —
Michael Coffee Chief Business Officer and Interim Chief Financial Officer	6/14/2010	—	— 105,000	—	100,000	5.13	301,400
Masatsune Okajima Vice President and Head of Japanese Office	1/29/2010 —	— —	— 99,750	— —	35,700 —	7.34 —	154,900 —
Kirk Johnson, Ph.D. Chief Scientific Officer	2/1/2010	—	— 99,750	—	100,000	7.34	434,000
Shintaro Asako, CPA. Former Chief Financial Officer (3)	1/29/2010 —	— —	— 99,750(3)	— —	35,700 —	7.34 —	154,900 —

- (1) The exercise price of the stock option awards is either equal to or greater than the grant date's closing price, or the prior day's closing price if the grant date fell over the weekend, as reported by Nasdaq.
- (2) Amounts listed in this column represent the aggregate full grant date fair value computed in accordance with ASC 718. Refer to Note 1, "The Company, Basis of Presentation and Summary of Significant Accounting Policies—Stock Based Compensation," in the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 for the relevant assumptions used to determine the valuation of awards.
- (3) Mr. Asako resigned from his positions as Chief Financial Officer on January 31, 2011. Unvested options held by him were forfeited concurrently with such resignation and all vested options will expire on May 1, 2011. In connection with his Separation Agreement, Mr. Asako has agreed to forego any bonus to which he may be entitled to for the 2010 fiscal year.
- (4) The discretionary cash incentives do not include threshold or maximum payouts.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR END

The following table discloses outstanding stock awards classified as exercisable and unexercisable as of December 31, 2010 for each of our current executive officers and Mr. Asako.

	Option Awards			
	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Option Exercise Price (\$/Sh.) (1)	Option Expiration Date
Yuichi Iwaki, M.D., Ph.D. President and Chief Executive Officer	40,000	—	11.60	1/4/2016(2)
	1,000	—	13.36	5/11/2016(3)
	20,000	—	11.48	7/9/2016(4)
	333,503	—	9.73	11/12/2016(2)
	94,786	35,214	4.42	1/6/2018(2)
	46,719	50,781	2.20	1/29/2019(2)
	13,429	45,171	7.34	1/28/2020(2)
Michael Coffee Chief Business Officer and Interim Chief Financial Officer	12,500	87,500	5.13	6/13/2020(2)
Masatsune Okajima Vice President and Head of Japanese Office	10,000	—	11.26	8/1/2016(6)
	15,000	—	22.60	9/1/2016(2)
	25,000	—	34.12	9/1/2016(2)
	125,064	—	9.73	11/12/2016(2)
	35,000	13,000	4.42	1/6/2018(2)
	19,767	21,483	2.20	1/29/2019(2)
	8,181	27,519	7.34	1/28/2020(2)
Kirk Johnson, Ph.D. Chief Scientific Officer	20,833	79,167	7.34	1/31/2020(2)
Shintaro Asako, CPA Former Chief Financial Officer	10,000	—	13.80	12/12/15(5)(7)
	15,000	—	23.40	11/12/2015(2)(7)
	25,000	—	33.10	11/12/2015(2)(7)
	15,000	—	11.60	1/4/2016(2)(7)
	125,064	—	9.73	11/12/2016(2)(7)
	53,959	20,041	4.42	1/6/2018(2)(7)
	28,748	31,252	2.20	1/29/2019(2)(7)
	8,181	27,519	7.34	1/28/2020(2)(7)

- (1) See Note 1, “The Company, Basis of Presentation and Summary of Significant Accounting Policies—Stock Based Compensation,” in the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 for the relevant assumptions used to determine the valuation of these stock option awards. The exercise price of the stock option awards is either equal to or greater than the grant date’s closing price, or the prior day’s closing price if the grant date fell over the weekend, as reported by the Nasdaq Market of the Osaka Securities Exchange, converted to U.S. dollars based on the respective dates exchange rate per www.Oanda.com or Nasdaq.
- (2) These grants vest in equal monthly installments over four years from the vesting commencement date, which was the date of grant.
- (3) This grant fully vests after six months from the vesting commencement date, which was the date of grant.
- (4) This grant vested 10,000 shares upon the date of grant, with 1/16 of the remaining shares vesting per quarter.
- (5) This grant vested immediately upon date of grant.
- (6) This grant vests in equal monthly installments over six months from the vesting commencement date, which was the date of grant.
- (7) Mr. Asako resigned from his positions as Chief Financial Officer on January 31, 2011. In connection with his resignation, Mr. Asako’s vested options will expire 90-days from his resignation date on May 1, 2011 and Mr. Asako’s unvested options expired on January 31, 2011.

OPTION EXERCISES AND STOCK VESTED

None of our Named Executive Officers exercised stock options during 2010.

SUMMARY OF POTENTIAL PAYMENTS UPON TERMINATION OR CHANGE OF CONTROL

Severance Protection Agreements

Our Severance Protection Agreements were established to provide our executive officers with certain payments upon a change of control. The following summary of the material provisions of the Severance Protection Agreements is qualified in its entirety by reference to the actual agreements. Our Severance Protection Agreements are structured on a “double-trigger” basis meaning that in order for an executive officer to receive a change of control payment, there must be a change of control and within 12 months after the change of control the executive officer’s employment must be terminated without “cause” or the executive officer must resign for “good reason.” Additionally, the Severance Protection Agreements provide that an executive officer may receive a change of control payment in the event the executive officer’s employment is terminated without “cause” within the 30 days immediately preceding a change of control or if, within the 30 days immediately preceding a change of control there is a material adverse change in the executive officer’s status, position or responsibilities and the executive officer is subsequently terminated within the 24 months following a change of control other than for “cause.” If these events occur, then, pursuant to the Severance Protection Agreement, the executive officer is entitled to receive the following benefits:

- a lump sum severance payment equal to two times the sum of the executive officer’s “base salary amount” and “bonus amount.” The “base salary amount” is the greater of the executive officer’s annual base salary (i) at the rate in effect on the termination date and (ii) at the highest rate in effect at any time during the 180-day period prior to a change of control. The “bonus amount” is the greater of (i) the annual bonus paid in respect of the fiscal year immediately preceding the termination date; (ii) the average of the annual bonus paid to the executive under any annual bonus plan during each of the three fiscal years ending immediately prior to the termination date; and (iii) the annual target bonus established for the executive officer for the fiscal year during which the termination occurs, in the event the executive officer was not employed for the entire fiscal year ending immediately prior to the termination date;
- a pro rata bonus computed based on the “bonus amount”;
- continued life insurance, disability, medical, dental and hospitalization coverage for a period of up to 24 months and reasonable outplacement services for a period of up to 12 months; and
- acceleration of vesting and other benefits regarding options to purchase our Common Stock or other equity compensation awards provided to the executive officer in any plans or agreements.

The executive’s receipt of the lump sum severance and continued benefits are subject to the executive’s execution of a release in favor of the Company.

The Severance Protection Agreements define “change of control” as:

- an acquisition of 40% or more of our voting securities by any person;
- a change in a majority of the members of the Board;
- a merger, substantial asset sale or similar transaction resulting in current stockholders owning 50% or less of the common stock and voting securities of the corporation or entity resulting from such transaction; or
- approval by our stockholders of our complete liquidation or dissolution.

Employment Agreements

Under the terms of the employment agreements with our current executive officers (other than Mr. Okajima), either party may terminate the agreement at any time upon three months’ notice. In lieu of three months’ notice, we may instead (at our election) provide the executive officer with a lump sum payment equal to 50%, or 75% for Dr. Iwaki, of his annual base compensation. Under Japanese law, we must provide Mr. Okajima

at least 30 days' prior dismissal notice or 30 days' pay in lieu thereof or a combination of such notice and pay requirements. In the event of termination of Mr. Okajima's at-will employment by us (other than for cause), we will provide six months of severance to Mr. Okajima.

The employment agreements provide that the executive officers may not disclose our confidential and proprietary information and must assign to us any inventions or other proprietary information discovered during their employment with us.

The following table reflects potential benefits or change in control payments to our executive officers if they were terminated on December 31, 2010. If the amount of these payments would cause an executive to become subject to the "golden parachute" excise tax imposed under Section 4999 of the Code, the change of control payments will be reduced so that the executive is not subject to an excise tax.

<u>Name</u>	<u>Termination by MediciNova without Cause</u>	<u>Change in Control and Termination without Cause or Voluntary Termination for Good Reason (1)</u>	<u>Termination by MediciNova, Inc. and Election to Waive Required Notice Period</u>
Yuichi Iwaki, M.D., Ph.D.			
Severance Pay	—	\$ 1,453,610(2)	\$ 367,545(3)
Pro Rata Bonus	—	\$ 236,745	—
Medical and Outplacement Benefits (4)	—	\$ 79,656	—
Acceleration of Equity Awards (5)	—	\$ 137,672	—
Michael Coffee			
Severance Pay	—	\$ 810,000(2)	\$ 150,000(7)
Pro Rata Bonus	—	\$ 105,000	—
Medical and Outplacement Benefits (4)	—	\$ 119,155	—
Acceleration of Equity Awards (5)	—	\$ —	—
Masatsune Okajima			
Severance Pay	142,500(8)	\$ 770,000(2)	\$ —
Pro Rata Bonus	—	\$ 100,000	—
Medical and Outplacement Benefits (9)	—	\$ 33,400	—
Acceleration of Equity Awards (5)	—	\$ 57,692	—
Kirk Johnson, Ph.D.			
Severance Pay	—	\$ 769,500(2)	\$ 142,500(7)
Pro Rata Bonus	—	\$ 99,750	—
Medical and Outplacement Benefits (4)	—	\$ 50,227	—
Acceleration of Equity Awards (5)	—	\$ —	—
Shintaro Asako, CPA (6)			
Severance Pay	—	\$ 770,000(2)	\$ 142,500(7)
Pro Rata Bonus	—	\$ 100,000	—
Medical and Outplacement Benefits (4)	—	\$ 28,200	—
Acceleration of Equity Awards (5)	—	\$ 84,254	—

- (1) Under the Severance Protection Agreements, "cause" is defined to include: the executive officer's conviction of a felony or any crime involving fraud, embezzlement or theft; willful engagement in illegal conduct or gross misconduct that is significantly injurious to us; or failure to perform his duties in a reasonably satisfactory manner after receipt of a notice from us detailing such failure. "Good reason" is defined to include: a material adverse change in status, position, responsibilities, including reporting responsibilities, or in base salary; a relocation of the place of principal employment by more than 50 miles; or any material breach by us of any provision of any agreement to which we and the applicable executive officer are parties.

- (2) Equals two times the executive officer's "base salary amount" and "bonus amount." The calculations in the table above assume that the executive's 2010 base salary is the "base salary amount" and the executive's bonus paid in 2009 is the "bonus amount", except that for Mr. Coffee and Dr. Johnson, the 2010 annual target bonus amount is the "bonus amount."
- (3) This severance pay is payable, at our election, if we decide to waive the three-month notice provision required for termination under the employment agreement and shall equal 75% of the executive officer's base salary in effect at the time of termination.
- (4) The value of health and dental benefits are estimated based on the premium each executive officer would be required to pay for 24 months of continuing medical coverage under the provisions of our medical plan required by the Consolidated Omnibus Budget Reconciliation Act (COBRA).
- (5) The \$4.71 closing price of our common stock on December 31, 2010 exceeded the \$4.42 exercise price of our stock option awards issued on January 6, 2008 and the \$2.20 exercise price of our stock option awards issued on January 29, 2009. We have computed the value of the acceleration of equity awards based on the sum of the difference between the closing price of our common stock on December 31, 2010 and the exercise price of each in-the-money stock option that would have been accelerated upon termination of an executive officer's employment on December 31, 2010.
- (6) Mr. Asako resigned from his position as Chief Financial Officer on January 31, 2011 and was paid \$237,500, which equals the salary that Mr. Asako would have received through November 30, 2011, in connection with his resignation, and we will pay 10 months of continuing medical and dental benefits.
- (7) This severance pay is payable, at our election, if we decide to waive the three-month notice provision required for termination under the employment agreements and shall equal 50% of the executive officer's annual base salary in effect at the time of termination.
- (8) This severance pay is payable, at our election, if we decide to terminate Mr. Okajima's employment other than for cause and shall equal six months of his annual base salary in effect at the time of termination.
- (9) Equals two times Mr. Okajima's annual Japanese benefits adjustment.

DIRECTOR COMPENSATION

We compensate non-employee directors for their service on the Board. Each non-employee director is eligible to receive the following fees related to their service on the Board:

- an initial fee of \$20,000 upon first becoming a member of the Board; and
- annual cash compensation of \$40,000, payable in equal quarterly installments in arrears.

We pay the Chairman of the Audit Committee of the Board further annual cash compensation of \$20,000. In addition, we reimburse our directors for reasonable expenses incurred in connection with attendance at Board and committee meetings.

Our non-employee directors receive nondiscretionary, automatic grants of nonstatutory stock options. A non-employee director is automatically granted an initial option to purchase 1,000 shares of Common Stock upon first becoming a member of the Board. The initial stock option is fully vested at the time of grant. Immediately after each of our regularly scheduled annual meetings of stockholders, each non-employee director is automatically granted a nonstatutory stock option to purchase 1,000 shares of Common Stock, provided the director has served on the Board for at least six months. Each annual stock option vests and becomes fully exercisable on the date which is six months after the date of the grant. The stock options granted to non-employee directors have a per share exercise price equal to 100% of the fair market value of the underlying shares on the date of grant and become fully vested if we are subject to a change of control.

In January 2006, each non-employee, non-consultant director was granted a one-time discretionary stock option to purchase 20,000 shares of our Common Stock at 100% of the fair market value of the underlying shares on the date of grant. These stock options were immediately vested as to 10,000 shares, and the remaining 10,000 shares vested quarterly over the subsequent four years. Our non-employee directors have not been granted any other discretionary stock options or stock awards.

The following table sets forth compensation information with respect to all of our non-employee directors for amounts earned during the year ended December 31, 2010.

Name (1)	Fees Paid in Cash (\$)	Option Awards (\$) (2)	Total (\$)
Alan W. Dunton, M.D. (3)	\$40,000	\$3,010	\$43,010
Jeff Himawan, Ph.D.	\$ — (4)	\$3,010	\$ 3,010
Arlene Morris	\$40,000	\$3,010	\$43,010
Hideki Nagao (5)	\$ 1,290	\$ —	\$ 1,290
John Prendergast, Ph.D.	\$60,000	\$3,010	\$63,010
Hiroaki Shigeta	\$40,000	\$3,010	\$43,010

(1) Dr. Iwaki has been omitted from the table, as he is an employee and receives no compensation for serving on the Board.

(2) Amounts in the Option Awards column reflect the grant date fair value as calculated in accordance with Topic 718. Refer to Note 1, “The Company, Basis of Presentation and Summary of Significant Accounting Policies—Stock Based Compensation,” in the Notes to Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 for the relevant assumptions used to determine the valuation of our awards. In fiscal year 2010, each non-employee director, excluding Mr. Nagao, was granted a stock option to purchase 1,000 shares of Common Stock, for which the total grant date fair value of each such stock option was \$3,010.

(3) Dr. Dunton resigned from the Board effective January 28, 2011.

(4) Dr. Himawan requested in the fourth quarter of fiscal year 2007 to discontinue receiving cash compensation for serving on the Board.

(5) Mr. Nagao resigned from the Board effective January 12, 2010 and the \$1,290 represents a pro-ration of the annual board fee.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information as of April 26, 2011 as to shares of Common Stock beneficially owned by: (i) each person who is known by us to own beneficially more than 5% of the Common Stock, (ii) each of our directors, (iii) each of our executive officers named under the "Summary Compensation Table," and (iv) all of our directors and executive officers as a group. Ownership information is based upon information furnished by the respective individuals or entities, as the case may be. The percentage of Common Stock beneficially owned is based on 15,280,990 shares outstanding as of April 26, 2011. In addition, shares issuable pursuant to stock options and warrants which may be exercised within 60 days of April 26, 2011 are deemed to be issued and outstanding and have been treated as outstanding in calculating the percentage ownership of those individuals possessing such interest, but not for any other individual.

Name and Address of Beneficial Owner (1)	Number of Shares of Common Stock Beneficially Owned	Percentage of Common Stock Beneficially Owned
5% Stockholders:		
Biotechnology Value Fund, L.P. (2)	1,455,610	9.5%
Essex Woodland Health Ventures Fund VI, L.P. (3)	1,215,370	8.0%
Burlingame Asset Management, LLC (4)	908,768	5.9%
Southpaw Asset Management L.P. (5)	956,294	6.3%
Directors and Executive Officers:		
Yuichi Iwaki, M.D., Ph.D. (6)	1,275,918	8.3%
Jeff Himawan, Ph.D. (7)	1,215,370	8.0%
Arlene Morris (8)	35,000	*
John K.A. Prendergast, Ph.D. (8)	47,000	*
Hiroaki Shigeta (8)	2,000	*
Shintaro Asako, CPA (9)	302,195	2.0%
Masatsune Okajima (10)	269,753	1.8%
Michael Coffee (11)	28,998	*
Kirk Johnson, Ph.D. (12)	35,031	*
All directors and executive officers as a group (8 persons) (13)	2,944,070	19.3%

* Amount represents less than 1% of the outstanding shares of our Common Stock.

- (1) Unless otherwise noted, the address of each beneficial owner listed in the table is c/o MediciNova, Inc., 4350 La Jolla Village Drive, Suite 950, San Diego, California 92122. Except as indicated by footnote, and subject to community property laws where applicable, the beneficial owner has sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by them.
- (2) Based upon a Schedule 13G filed with the SEC on December 24, 2009 by Biotechnology Value Fund, L.P. and includes shares owned by the following affiliated entities: (a) Biotechnology Value Fund, L.P. 325,414 shares; (b) Biotechnology Value Fund II, L.P. 224,859 shares; (c) BVF Investments, L.L.C. 821,233 shares; and (d) Investment 10, L.L.C. 84,102 shares. BVF Partners L.P., BVF Inc. and Mark N. Lampert beneficially own an aggregate of 1,455,610 shares. The principal business address for Biotechnology Value Fund, L.P. is 900 North Michigan Avenue, Suite 1100, Chicago, Illinois 60611.
- (3) Based upon a Schedule 13D filed with the SEC on February 13, 2006 and subsequent Form 4s filed by Dr. Himawan. Reflects 1,170,370 shares owned by Essex Woodland Health Ventures Fund VI, L.P., and 45,000 shares subject to stock options exercisable within 60 days of April 26, 2011. The principal business address for Essex Woodlands Health Ventures Fund VI, L.P. is 335 Bryant Street, 3rd Floor, Palo Alto, California 94301. We have been advised by Essex Woodlands Health Ventures, general partner of Essex Woodlands Health Ventures Fund VI, L.P., that up to 12 persons who are partners of Essex Woodlands Health Ventures have voting and investment power over shares held by Essex Woodlands Health Ventures Fund VI, L.P. At least a majority of those voting is required for an investment decision, and in practice the decisions are almost always made pursuant to a unanimous vote.

- (4) Based upon a Schedule 13G/A filed with the SEC on February 14, 2011 by Burlingame Asset Management, LLC and includes shares owned by the following affiliated entities: (a) Burlingame Equity Investors, LP 403,539 shares; (b) Burlingame Equity Investors II, LP 47,064 shares; (c) Burlingame Equity Investors (Offshore) Ltd. 72,826 shares and (d) Burlingame Special Opportunities III, LP 385,339 shares. Burlingame Asset Management, LLC and Blair E. Sanford beneficially own an aggregate of 908,768 shares. The principal business address for Burlingame Asset Management, LLC is One Market Street, Spear Street Tower, Suite 3750, San Francisco, California 94105.
- (5) Based upon a Schedule 13G/A filed with the SEC on January 19, 2011 by Southpaw Asset Management LP and includes shares owned by the following affiliated entities: (a) Southpaw Credit Opportunity Master Fund LP 873,149 shares; and (b) two managed accounts 83,145 shares. Southpaw Asset Management LP, Southpaw Holdings LLC, Mr. Kevin Wyman and Mr. Howard Golden beneficially own an aggregate of 956,294 shares. The principal business address for Southpaw Asset Management LP is Four Greenwich Office Park, Greenwich, Connecticut 06831.
- (6) Includes 693,972 shares held by Dr. Iwaki and 581,946 shares subject to stock options exercisable within 60 days of April 26, 2011.
- (7) Reflects 1,170,370 shares owned by Essex Woodland Health Ventures Fund VI, L.P., of which Dr. Himawan serves as Managing Director and 45,000 shares subject to stock options exercisable within 60 days of April 26, 2011. Dr. Himawan has named Essex Woodlands Health Ventures as the designee to receive any stock options Dr. Himawan receives in his capacity as director. Dr. Himawan disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein.
- (8) Reflects shares subject to stock options exercisable within 60 days of April 26, 2011.
- (9) Mr. Asako resigned as Chief Financial Officer on January 31, 2011. Includes 17,707 shares held by Mr. Asako and 284,488 stock options vested at January 31, 2011 and exercisable within 90 days after his resignation.
- (10) Includes 17,728 shares held by Mr. Okajima and 252,025 shares subject to stock options exercisable within 60 days of April 26, 2011.
- (11) Mr. Coffee commenced his employment with MediciNova in June 2010. Shares owned were purchased during the public offering which closed on March 29, 2011.
- (12) Dr. Johnson commenced his employment with MediciNova in February 2010. Shares owned were purchased during the public offering which closed on March 29, 2011.
- (13) Includes 1,887,770 shares held of record and 1,056,300 shares subject to stock options that are exercisable within 60 days of April 26, 2011. Mr. Asako's owned shares and vested options are excluded.

REPORT OF THE AUDIT COMMITTEE OF THE BOARD

The Audit Committee operates under a written charter adopted by the Board of Directors (the "Board") on September 28, 2004. A copy of the Audit Committee Charter is available on our web site at www.medicinova.com. The members of the Audit Committee are John K.A. Prendergast, Ph.D. (Chairman), Arlene Morris and Hiroaki Shigeta, each of whom meets the independence standards of the Nasdaq Marketplace Rules and the rules and regulations of the SEC.

The Audit Committee oversees our financial reporting process on behalf of the Board and is responsible for providing independent, objective oversight of our accounting, auditing, financial reporting, internal control and legal compliance functions. It is not the duty of the Audit Committee to plan or conduct audits or to determine that our financial statements are complete and accurate and are in accordance with generally accepted accounting principles. Management is responsible for our financial statements and the reporting process, including the system of internal controls. The independent registered public accounting firm is responsible in its report for expressing an opinion on the conformity of those financial statements with generally accepted accounting principles.

The Audit Committee has reviewed and discussed our audited financial statements contained in the Annual Report on Form 10-K for the year ended December 31, 2010 with our management and its independent registered public accounting firm. The Audit Committee met privately with the independent registered public accounting firm and discussed issues deemed significant by such firm, including those matters required by Statements of Auditing Standards No. 61, Communication with Audit Committees, as amended. In addition, the Audit Committee has received the written disclosures from our independent registered public accounting firm required by PCAOB Rule 3526 (formerly Independence Standards Board Standard No. 1) and discussed with such firm its independence from us. KPMG advised the Audit Committee that KPMG was and continues to be independent accountants with respect to the Company.

Based upon the reviews and discussions outlined above, the Audit Committee recommended to the Board that the audited financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2010 for filing with the Securities and Exchange Commission.

Audit Committee

John K.A. Prendergast, Ph.D. (Chairman)
Arlene Morris
Hiroaki Shigeta

OTHER MATTERS

We know of no other business that will be presented at the Annual Meeting. If any other business is properly brought before the Annual Meeting, it is intended that proxies in the enclosed form will be voted in accordance with the judgment of the persons voting the proxies.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Under Section 16(a) of the Exchange Act, our directors, executive officers and beneficial holders of more than 10% of our Common Stock are required to report their initial ownership of the Common Stock and any subsequent change in that ownership to the SEC. Specific due dates for these reports have been established, and we are required to identify those persons who failed to timely file these reports. To our knowledge, based solely on a review of such reports furnished to us 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 our officers, directors and 10% stockholders were satisfied.

STOCKHOLDER PROPOSALS FOR THE 2012 ANNUAL MEETING

Any of our stockholders may propose business to be brought before our 2012 Annual Meeting of Stockholders. Proposals of our stockholders that are intended to be presented by such stockholders at our 2012 Annual Meeting of Stockholders must be received by our Secretary no later than January 6, 2012 in order that they may be included in our proxy statement and form of proxy relating to such meeting. A stockholder proposal not included in our proxy statement for the 2012 Annual Meeting of Stockholders will be ineligible for presentation at the meeting unless the stockholder gives timely notice of the proposal in writing to our Secretary at our principal executive officers and otherwise complies with the provisions of our Bylaws. To be timely, the Bylaws provide that we must have received the stockholder's notice not less than 90 days nor more than 120 days in advance of the anniversary of the date this Proxy Statement was released to stockholders in connection with the Annual Meeting. Stockholder proposals submitted pursuant to Rule 14a-8 under the Exchange Act and intended to be presented at our 2012 Annual Meeting of Stockholders, must be received by our Secretary no later than January 6, 2012 (120 days before the anniversary of the date on which we first mailed our proxy materials for the Annual Meeting) in order to be considered for inclusion in our proxy materials for that meeting. However, if the date of the 2012 Annual Meeting of Stockholders is changed by more than 30 days from the date contemplated at the time of this Proxy Statement, we must receive the stockholder's notice not later than the close of business on the later of (i) the 90th day prior to such annual meeting and (ii) the seventh day following the day on which public announcement of the date of such meeting is first made.

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.

A number of brokers with account holders who are our stockholders will be "householding" our proxy materials. A single Proxy Statement will 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 they will be "householding" communications to your address, "householding" will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in "householding" and would prefer to receive a separate Proxy Statement and annual report, please notify your broker, and direct a written request to us at MediciNova, Inc., 4350 La Jolla Village Drive, Suite 950, San Diego,

California 92122, or contact us via telephone at (858) 373-1500. We will provide a separate copy of this Proxy Statement and the annual report to any stockholder at a shared address to which a single copy was delivered. Stockholders who currently receive multiple copies of the Proxy Statement and/or annual report at their address and would like to request "householding" of their communications should contact their broker.

ANNUAL REPORT

A copy of our 2010 Annual Report to Stockholders, excerpted from our Annual Report on Form 10-K for the fiscal year ended December 31, 2010, has been mailed with this Proxy Statement.

Any person who was a beneficial owner of our Common Stock on the record date may request a copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2010, including financial statements thereto, but not including exhibits, and it will be furnished without charge upon receipt of a written request. Any such request should be addressed to us at MediciNova, Inc., 4350 La Jolla Village Drive, Suite 950, San Diego, California 92122, Attention: Investor Relations. The request must include a representation by the stockholder that, as of April 19, 2011, the stockholder was entitled to vote at the Annual Meeting. Our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 is on file with the SEC and may be accessed electronically at the SEC's website at www.sec.gov or at the Investor Relations-SEC Filings section of our website at www.medicinova.com.

Whether or not you intend to be present at the Annual Meeting, we urge you to return your signed proxy promptly.

By Order of the Board of Directors



Yuichi Iwaki, M.D., Ph.D.
President, Chief Executive Officer and Director

April 29, 2011

MEDICINOVA, INC.

Annual Meeting of Stockholders, Tuesday, June 14, 2011

**This Proxy is Solicited on Behalf of the Board of Directors of
MEDICINOVA, INC.**

As an alternative to completing this form, you may enter your vote instruction by telephone at 1-800-PROXIES, or via the Internet at WWW.VOTEPROXY.COM and follow the simple instructions. Use the Company Number and Account Number shown on your proxy card.

The undersigned revokes all previous proxies, acknowledges receipt of the Notice of Annual Meeting of Stockholders to be held on Tuesday, June 14, 2011 and the Proxy Statement and appoints each of Yuichi Iwaki, M.D., Ph.D. and Michael Coffee, jointly and severally, as proxies for the undersigned, with full power of substitution, to vote all shares of Common Stock of MEDICINOVA, INC., or MediciNova, which the undersigned is entitled to vote, either on his or her own behalf or on behalf of any entity or entities, at the 2010 Annual Meeting of Stockholders of MediciNova to be held at the Northern Trust Tower, 4370 La Jolla Village Drive, Suite 210, San Diego, California 92122 on Tuesday, June 14, 2011, at 3:00 p.m. Pacific Daylight Time, or the Annual Meeting, and at any adjournment or postponement thereof, with the same force and effect as the undersigned might or could do if personally present thereat. The shares represented by this Proxy shall be voted in the manner set forth herein. If no direction is provided, this Proxy will be voted as recommended by the Board of Directors. The proxy holders are also authorized to vote upon all other matters as may properly come before the Annual Meeting, or any adjournment thereof, utilizing their own discretion as set forth in the Notice of Annual Meeting and Proxy Statement. MediciNova cannot assure that your shares will be voted unless you sign, date and return this Proxy so that it is received by June 10, 2011.

CONTINUED AND TO BE SIGNED ON REVERSE SIDE

**ANNUAL MEETING OF STOCKHOLDERS OF
MEDICINOVA, INC.**

June 14, 2011

NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL:

The proxy statement is available at www.medicinova.com

**Please sign, date and mail
your proxy card in the
envelope provided as soon
as possible.**

” Please detach along perforated line and mail in the envelope provided. ”

n 20230000000000000000 0

061010

PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE

1. To elect one Class I director to serve until the 2014 Annual Meeting of Stockholders and until each of their successors has been duly elected and qualified unless he or she resigns or is removed.

NOMINEE:
O Jeff Himawan, Ph.D.

- FOR THE NOMINEE**
- WITHHOLD AUTHORITY FOR THE NOMINEE**
- FOR ALL EXCEPT (See instructions below)**

INSTRUCTIONS: To withhold authority to vote for any individual nominee(s), mark "FOR ALL EXCEPT" and fill in the circle next to each nominee you wish to withhold, as shown here:

To change the address on your account, please check the box at the right and indicate your new address in the address space above. Please note that changes to the registered name(s) on the account may not be submitted via this method.

FOR AGAINST ABSTAIN

2. To ratify the appointment of KPMG LLP as independent registered public accounting firm of MediciNova for the fiscal year ending December 31, 2011.

In accordance with the discretion of the proxy holders, the proxy holders are authorized to vote upon all matters incident to the conduct of the meeting and upon other matters as may properly come before the meeting.

The Board of Directors recommends a vote IN FAVOR OF the director nominee listed in Proposal One and a vote IN FAVOR OF each of the other listed proposals. This Proxy, when properly executed, will be voted as specified herein by the undersigned stockholder. If no specification is made, this Proxy will be voted IN FAVOR OF Proposal Two.

Signature of Stockholder Date Signature of Stockholder Date

Note: Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each holder should sign. When signing as executor, administrator, attorney, trustee or guardian, please give full title as such. If the signer is a corporation, please sign full corporate name by duly authorized officer, giving full title as such. If signer is a partnership, please sign in partnership name by authorized person.