Filed by the Registrant ⊠

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A INFORMATION

PROXY STATEMENT PURSUANT TO SECTION 14(a) OF THE SECURITIES EXCHANGE ACT OF 1934

Filed by a Party other than the Registrant \square

| | | appropriate box: | | | | | |
|---|---------|--|--|--|--|--|--|
| | | minary Proxy Statement | | | | | |
| ☐ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)) | | | | | | | |
| □ Definitive Proxy Statement | | | | | | | |
| | Defi | nitive Additional Materials | | | | | |
| | Solic | citing Material Pursuant to §240.14a-12 | | | | | |
| | | ANT DIODILADMA INC | | | | | |
| | | AVI BIOPHARMA, INC. (Name of Registrant as Specified In Its Charter) | | | | | |
| | | (Name of Person(s) Filing Proxy Statement, if other than the Registrant) | | | | | |
| Payn | nent of | Filing Fee (Check the appropriate box): | | | | | |
| X | No fe | ee required. | | | | | |
| | Fee o | computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11. | | | | | |
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| | (5) | Total fee paid: | | | | | |
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| | (1) | Amount Previously Paid: | | | | | |
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| (3) | Filing Party: |
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| (4) | Date Filed: |
| | |



May 20, 2011

Dear Shareholder:

You are cordially invited to attend the Annual Meeting of Shareholders of AVI BioPharma, Inc., which will be held on Monday, June 13, 2011, at 2:00 p.m., local time, at the Country Inn, 19333 North Creek Parkway, Bothell, Washington 98011 for the following purposes:

- 1. elect as Group II directors the three nominees named in this proxy statement;
- 2. approve the adoption of the 2011 Equity Incentive Plan;
- 3. consider an advisory vote on executive compensation;
- 4. consider an advisory vote on whether an advisory vote on executive compensation should be held every one, two or three years;
- 5. ratify the form of indemnification agreement to be entered into with our current and future directors;
- 6. approve a proposal to restate and amend our Third Restated and Amended Articles of Incorporation, as amended to date, to increase the number of authorized shares of common stock from 200,000,000 to 300,000,000;
- 7. ratify the selection of KPMG LLP as our independent registered public accounting firm for the current year ending December 31, 2011; and
- 8. transact such other business as may properly come before the annual meeting or any continuation, postponement or adjournment thereof.

The accompanying Notice of Meeting and Proxy Statement describe these matters. We urge you to read this information carefully.

The board of directors unanimously believes that election of its nominees for directors, adoption of the 2011 Equity Incentive Plan, approval of the compensation of our named executive officers, approval of the three-year frequency of the advisory vote on executive compensation, ratification of the form of indemnification agreement, approval of the restatement and amendment of our Third Restated and Amended Articles of Incorporation, as amended to date, and ratification of its selection of KPMG LLP as the independent registered public accounting firm are in our best interests and that of our shareholders, and, accordingly, recommends a vote FOR election of the three nominees for directors, FOR the adoption of the 2011 Equity Incentive Plan, FOR the approval of the compensation of our named executive officers, for the "EVERY THREE YEARS" option as the frequency of the advisory vote on executive compensation, FOR the ratification of the form of indemnification agreement, FOR the proposal to restate and amend our Third Restated and Amended Articles of Incorporation, as amended to date, and FOR the ratification of the selection of KPMG LLP as our independent registered public accountants.

In addition to the business to be transacted as described above, management will speak on our developments of the past year and respond to comments and questions of general interest to shareholders.

It is important that your shares be represented and voted whether or not you plan to attend the annual meeting in person. You may vote on the Internet, by telephone or by completing and mailing the enclosed proxy card or the form forwarded by your bank, broker or other holder of record. Voting over the Internet, by telephone or by written proxy will ensure your shares are represented at the annual meeting. Voting on the Internet or by

telephone may not be available to all shareholders. Please review the instructions on the proxy card or the information forwarded by your bank, broker or other holder of record regarding each of these voting options.

On behalf of the Board of Directors, I would like to express our appreciation for your support of the Company.

Sincerely,

Christopher Garabedian,

President, Chief Executive Officer and Director



NOTICE OF ANNUAL MEETING OF SHAREHOLDERS To Be Held on Monday, June 13, 2011

To the Shareholders of AVI BioPharma, Inc.:

NOTICE IS HEREBY GIVEN that the 2011 annual meeting of shareholders of AVI BioPharma, Inc., an Oregon corporation, will be held on Monday, June 13, 2011 at 2:00 p.m., local time, at the Country Inn, 19333 North Creek Parkway, Bothell, Washington 98011 for the following purposes:

- 1. to elect the three nominees named in the attached proxy statement as Group II directors to the board of directors of AVI BioPharma for a two-year term of office expiring at the 2013 annual meeting of shareholders;
- 2. to approve the adoption of the 2011 Equity Incentive Plan;
- 3. to approve the compensation of our named executive officers;
- 4. to approve the three-year frequency of the advisory vote on executive compensation;
- 5. to ratify the form of indemnification agreement to be entered into with our current and future directors;
- 6. to approve a proposal to restate and amend our Third Restated and Amended Articles of Incorporation, as amended to date, to increase the number of authorized shares of common stock from 200,000,000 to 300,000,000;
- 7. to ratify the selection of KPMG LLP as our independent registered public accountants for the year ending December 31, 2011; and
- 8. to transact such other business as may properly come before the annual meeting or any continuation, postponement or adjournment thereof.

The foregoing items of business are more fully described in the proxy statement accompanying this notice. We are not aware of any other business to come before the meeting.

The board of directors has fixed the close of business on May 5, 2011 as the record date for the determination of shareholders entitled to notice of, and to vote at, this annual meeting and at any continuation, postponement or adjournment thereof. A list of shareholders will be available for inspection by our shareholders at our principal executive offices at 3450 Monte Villa Parkway, Suite 101, Bothell, Washington 98021 beginning two business days after notice of the annual meeting is given and continuing through the meeting.

Important Notice Regarding the Availability of Proxy Materials for the Shareholder Meeting to be Held on Monday, June 13, 2011: the Proxy Statement for the Annual Meeting and the Annual Report to Shareholders for the year ended December 31, 2010 are available at http://bnymellon.mobular.net/bnymellon/avii.

By Order of the Board of Directors,

Effie Toshav

Senior Vice President, General Counsel and Secretary

Bothell, Washington May 20, 2011

ALL SHAREHOLDERS ARE CORDIALLY INVITED TO ATTEND THE ANNUAL MEETING IN PERSON. IF YOU PLAN TO ATTEND, PLEASE NOTIFY US BY CONTACTING INVESTOR RELATIONS AT (425) 354-5140 OR INVESTORRELATIONS@AVIBIO.COM.

WHETHER OR NOT YOU EXPECT TO ATTEND THE ANNUAL MEETING, PLEASE COMPLETE, DATE, SIGN AND RETURN THE ENCLOSED PROXY CARD AS PROMPTLY AS POSSIBLE IN ORDER TO ENSURE YOUR REPRESENTATION AT THE ANNUAL MEETING. A RETURN ENVELOPE (WHICH IS POSTAGE PREPAID IF MAILED IN THE UNITED STATES) IS ENCLOSED FOR THAT PURPOSE. YOU ALSO MAY VOTE YOUR SHARES ON THE INTERNET OR BY TELEPHONE BY FOLLOWING THE INSTRUCTIONS ON YOUR PROXY CARD.

EVEN IF YOU HAVE PROVIDED US WITH YOUR PROXY, YOU MAY STILL VOTE IN PERSON IF YOU ATTEND THE ANNUAL MEETING. PLEASE NOTE, HOWEVER, THAT IF YOUR SHARES ARE HELD OF RECORD BY A BROKER, BANK OR OTHER NOMINEE AND YOU WISH TO VOTE AT THE ANNUAL MEETING, YOU MUST OBTAIN FROM THE RECORD HOLDER A PROXY ISSUED IN YOUR NAME.

TABLE OF CONTENTS

| | Page |
|---|------|
| <u>General</u> | 1 |
| Who Can Vote | 1 |
| Shares Outstanding and Quorum | 1 |
| Proxy Card and Revocation of Proxy | 1 |
| <u>Voting of Shares</u> | 2 |
| Required Vote | 2 |
| Counting of Votes | 3 |
| Effect of Not Casting Your Vote | 3 |
| Solicitation of Proxies | 4 |
| Shareholder Proposals for the 2012 Annual Meeting | 4 |
| Attending the Annual Meeting | 4 |
| Householding of Proxy Materials | 5 |
| AVI BIOPHARMA, INC. DIRECTORS AND EXECUTIVE OFFICERS | 6 |
| Directors, Director Nominees and Executive Officers | 6 |
| ELECTION OF AVI BIOPHARMA, INC. DIRECTORS (Proposal 1) | 11 |
| General General | 11 |
| Nominees for Group II Directors Election at the 2011 Annual Meeting of Shareholders | 11 |
| Vote Required and Board of Directors Recommendation | 12 |
| APPROVAL OF THE 2011 EQUITY INCENTIVE PLAN (Proposal 2) | 13 |
| Summary of the 2011 Plan | 13 |
| Summary of U.S. Federal Income Tax Consequences | 19 |
| Number of Awards Granted to Employees, Consultants, and Directors | 21 |
| Vote Required and Board of Directors Recommendation | 22 |
| ADVISORY VOTE ON EXECUTIVE COMPENSATION (Proposal 3) | 23 |
| 2010 Compensation Program Highlights | 23 |
| Advisory Vote and Board Recommendation | 24 |
| Vote Required and Board of Directors Recommendation | 24 |
| ADVISORY VOTE ON FREQUENCY OF ADVISORY VOTE ON EXECUTIVE COMPENSATION (Proposal 4) | 25 |
| Vote Required and Board of Directors Recommendation | 25 |
| RATIFICATION OF FORM OF INDEMNIFICATION AGREEMENT FOR AVI BIOPHARMA'S DIRECTORS (Proposal 5) | 26 |
| General | 26 |
| Existing Indemnification and Insurance Protection | 26 |
| Material Terms of the Indemnification Agreement | 27 |
| Indemnification for Liabilities under the Securities Act of 1933 | 28 |
| Vote Required and Board of Directors Recommendation | 28 |
| ADOPTION OF RESTATED AND AMENDED ARTICLES OF INCORPORATION (Proposal 6) | 29 |
| Purpose and Rationale for the Proposed Adoption | 29 |
| Possible Anti-Takeover Effect | 30 |
| Effect of the Proposed Adoption | 30 |
| Vote Required and Board of Directors Recommendation | 31 |
| RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM (Proposal 7) | 32 |
| Fees Billed to Us by KPMG LLP during 2010 and 2009 | 32 |
| Policy on Audit Committee Pre-Approval of Fees | 32 |
| Vote Required and Board of Directors Recommendation | 32 |
| STOCK OWNED BY AVI BIOPHARMA, INC. MANAGEMENT AND PRINCIPAL SHAREHOLDERS | 33 |
| Equity Compensation Plan Information | 35 |
| AUDIT COMMITTEE REPORT | 36 |

TABLE OF CONTENTS

(continued)

| | Page |
|---|------|
| CORPORATE GOVERNANCE AND BOARD MATTERS | 37 |
| Board's Role in Risk Oversight | 37 |
| Board Leadership Structure | 37 |
| Board of Directors and Committee Meetings | 37 |
| Determination Regarding Director Independence | 38 |
| Code of Conduct | 38 |
| Committees of the Board of Directors | 38 |
| Communications with the Board of Directors | 40 |
| Compensation of Directors | 41 |
| Director Compensation for 2010 | 42 |
| COMPENSATION POLICIES, PRACTICES, RISKS AND RELATED ISSUES | 43 |
| <u>Overview</u> | 43 |
| Risk Assessment and Compensation Practices | 43 |
| EXECUTIVE COMPENSATION | 45 |
| Compensation Discussion and Analysis | 45 |
| Compensation Committee Report | 61 |
| Summary Compensation Table | 61 |
| Grants of Plan Based Awards in 2010 | 63 |
| Outstanding Equity Awards at 2010 Year End | 64 |
| 2010 Option Exercises and Stock Vested | 64 |
| 2010 Pension Benefits | 64 |
| 2010 Nonqualified Deferred Compensation | 65 |
| Potential Payments Upon Termination or a Change in Control | 65 |
| CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS | 67 |
| Approval of Related Party Transactions | 67 |
| Section 16(a) Beneficial Ownership Reporting Compliance | 67 |
| Compensation Committee Interlocks and Insider Participation | 67 |
| ANNUAL REPORT | 67 |
| <u>OTHER MATTERS</u> | 68 |
| APPENDIX A: 2011 Equity Incentive Plan | A-1 |
| APPENDIX B: Form of Indemnification Agreement | B-1 |
| APPENDIX C: Fourth Restated and Amended Articles of Incorporation | C-1 |
| | |



PROXY STATEMENT FOR THE AVI BIOPHARMA 2011 ANNUAL MEETING OF SHAREHOLDERS

INFORMATION CONCERNING VOTING AND SOLICITATION

General

The enclosed proxy is solicited on behalf of the board of directors of AVI BioPharma, Inc., an Oregon corporation (the "Company"), for use at the 2011 annual meeting of shareholders to be held on Monday, June 13, 2011, at 2:00 p.m., local time, or at any continuation, postponement or adjournment thereof, for the purposes discussed in this proxy statement and in the accompanying Notice of Annual Meeting and any business properly brought before the annual meeting. Proxies are solicited to give all shareholders of record an opportunity to vote on matters properly presented at the annual meeting. We mailed this proxy statement and the enclosed proxy card to all shareholders entitled to vote at the annual meeting for the first time on or about May 20, 2011. In the mailing, we included copies of our Annual Report to shareholders for the year ended December 31, 2010. The annual meeting will be held at the Country Inn, 19333 North Creek Parkway, Bothell, Washington 98011.

Who Can Vote

You are entitled to vote if you were a shareholder of record of our common stock, \$0.0001 par value per share, as of the close of business on May 5, 2011. Your shares may be voted at the annual meeting only if you are present in person or represented by a valid proxy.

Shares Outstanding and Quorum

At the close of business on May 5, 2011, 135,564,651 shares of our common stock were outstanding and entitled to vote. Each share of common stock is entitled to one vote on each matter presented. There is no cumulative voting. A majority of the outstanding shares of our common stock entitled to vote, present in person or represented by proxy, will constitute a quorum at the annual meeting. If less than a majority of the outstanding shares entitled to vote are represented at the annual meeting, a majority of the shares present at the annual meeting may adjourn the annual meeting to another date, time or place, and notice need not be given of the new date, time or place if the new date, time or place is announced at the annual meeting before an adjournment is taken.

Proxy Card and Revocation of Proxy

You may vote by completing and mailing the enclosed proxy card. If you sign the proxy card but do not specify how you want your shares to be voted, your shares will be voted by the proxy holders named in the enclosed proxy (i) in favor of the election of the three director nominees named in this proxy statement, (ii) in favor of the adoption of the 2011 Equity Incentive Plan, (iii) in favor of the approval of the compensation of our named executive officers, (iv) in favor of the approval of the three-year frequency of the advisory vote on executive compensation, (v) in favor of the ratification of the form of indemnification agreement to be entered into with our current and future directors, (vi) in favor of the approval to restate and amend our Third Restated and Amended Articles of Incorporation, as amended to date, and (vii) in favor of ratification of the selection of KPMG LLP as our independent registered public accountants for the year ending December 31, 2011. In their discretion, the proxy holders named in the enclosed proxy are authorized to vote on any other matters that may

properly come before the annual meeting and at any continuation, postponement or adjournment thereof. The board of directors knows of no other items of business that will be presented for consideration at the annual meeting other than those described in this proxy statement. In addition, no other shareholder proposal or nomination was received on a timely basis, so no such matters may be brought to a vote at the annual meeting.

If you vote by proxy, you may revoke that proxy at any time before it is voted at the annual meeting. Shareholders of record may revoke a proxy by sending to our corporate secretary at our principal executive office at 3450 Monte Villa Parkway, Suite 101, Bothell, Washington 98021, a written notice of revocation or a duly executed proxy bearing a later date or by attending the annual meeting in person and voting in person. Attendance at the annual meeting will not, by itself, revoke a proxy. In order to be effective, all revocations or later-filed proxies must be delivered to us at our Bothell, Washington address not later than 5:00 p.m. local time on the business day prior to the day of the annual meeting. If your shares are held in the name of a broker, bank or other nominee, you may change your vote by submitting new voting instructions to your bank, broker or other nominee. Please note that if your shares are held of record by a broker, bank or other nominee, and you decide to attend and vote at the annual meeting, your vote in person at the annual meeting will not be effective unless you present a legal proxy, issued in your name from the record holder, your broker, bank or other nominee.

Voting of Shares

Shareholders of record as of the close of business on May 5, 2011 are entitled to one vote for each share of our common stock held on all matters to be voted upon at the annual meeting. You may vote by attending the annual meeting and voting in person. You also may vote on the Internet, by telephone or by completing and mailing the enclosed proxy card or the form forwarded by your bank, broker or other holder of record. Voting on the Internet or by telephone may not be available to all shareholders. The Internet and telephone voting facilities will close at 11:59 p.m., Eastern Time, on June 12, 2011. Shareholders who vote through the Internet should be aware that they may incur costs to access the Internet, such as usage charges from telephone companies or Internet service providers and that these costs must be borne by the shareholder. Shareholders who vote by Internet or telephone need not return a proxy card or the form forwarded by your bank, broker or other holder of record by mail. If your shares are held by a bank, broker or other nominee, please refer to the instructions they provide for voting your shares. All shares entitled to vote and represented by properly executed proxies received before the polls are closed at the annual meeting, and not revoked or superseded, will be voted at the annual meeting in accordance with the instructions indicated on those proxies. Under Oregon law, shareholders are not entitled to dissenter's rights with respect to any of the proposals set forth in this proxy statement. YOUR VOTE IS IMPORTANT.

Required Vote

Proposal No. One: The affirmative vote of a plurality, or the largest number, of the shares of common stock present in person or by proxy at the meeting and entitled to vote is required for the election of each director. This means that the three director nominees who receive the highest number of affirmative "FOR" votes will be elected to the board.

Proposal Nos. Two, Five and Seven: The votes cast in favor must exceed the votes cast against for these proposals to be approved. Abstentions and broker non-votes, if any, will not have any effect on the results of these votes.

Proposal No. Three: Because this proposal asks for a non-binding, advisory vote, there is no "required vote" that would constitute approval. We value the opinions expressed by our shareholders in this advisory vote, and our compensation committee, which is responsible for overseeing and administering our executive compensation programs, will consider the outcome of the vote when designing our compensation programs and making future compensation decisions for our named executive officers. Abstentions and broker non-votes, if any, will not have any effect on the results of those deliberations.

Proposal No. Four: This proposal also calls for a non-binding, advisory vote. Our board of directors has recommended a vote for every three years. However, if another frequency receives more votes, our board of directors will take that fact into account when making its decision on how often to hold executive compensation advisory votes. Abstentions and broker non-votes, if any, will not have any effect on the results of those deliberations.

Proposal No. Six: The affirmative vote of the holders of a majority of the outstanding shares of our common stock will be required to approve this proposal. As a result, abstentions or the failure to submit a proxy or vote in person at the annual meeting of shareholders will have the same effect as a vote against the proposal.

Counting of Votes

Proposal No. One: You may either vote "FOR" or "WITHHOLD" authority to vote for each nominee for the board.

Proposal Nos. Two, Three, Five, Six and Seven: You may vote "FOR," "AGAINST" or "ABSTAIN" on these proposals.

Proposal No. Four: You may vote "EVERY YEAR," "EVERY TWO YEARS," "EVERY THREE YEARS" or "ABSTAIN."

If you do not provide voting instructions to your broker or other nominee on non-routine items (our Proposals One, Two, Three, Four and Five), such shares cannot be voted and will be considered "broker non-votes."

A representative of BNY Mellon Shareowner Services, our transfer agent, will tabulate votes and act as the independent inspector of election. All votes will be tabulated by the inspector of election, who will separately tabulate affirmative and negative votes, abstentions and broker "non-votes." Shares held by persons attending the annual meeting but not voting, shares represented by proxies that reflect abstentions as to a particular proposal and broker "non-votes" will be counted as present for purposes of determining a quorum. With the exception of Proposal Six, abstentions and broker non-votes are not counted as voting either for or against a proposal and therefore will have no effect on the results of the vote. For Proposal Six, because a majority of our outstanding shares must approve the restatement and amendment of our articles of incorporation, abstentions, broker non-votes and the failure to submit a proxy or vote in person have the same effect as a vote "against" the proposal. A broker non-vote occurs when a nominee holding shares for a beneficial owner has not received voting instructions from the beneficial owner and does not have discretionary authority to vote the shares.

Effect of Not Casting Your Vote

If you hold your shares in street name it is critical that you cast your vote if you want it to count in the election of directors. In the past, if you held your shares in street name and you did not indicate how you wanted your shares voted in the election of directors, your bank or broker was allowed to vote those shares on your behalf in the election of directors as they felt appropriate.

Recent changes in regulation were made to take away the ability of your bank or broker to vote your uninstructed shares in the election of directors on a discretionary basis. Thus, if you hold your shares in street name and you do not instruct your bank or broker how to vote in the election of directors, no votes will be cast on your behalf. Similarly, your bank or broker will not be able to vote your uninstructed shares with respect to the adoption of the 2011 Equity Incentive Plan, approval of the compensation of our named executive officers, approval of the three-year frequency of the advisory vote on executive compensation and ratification of the form of indemnification agreement. Your bank or broker will, however, continue to have discretion to vote any uninstructed shares on the approval of the restatement and amendment of our Third Restated and Amended

Articles of Incorporation, as amended to date, and the ratification of the appointment of our independent registered public accounting firm. If you are a shareholder of record and you do not cast your vote, no votes will be cast on your behalf on any of the items of business at the annual meeting.

Solicitation of Proxies

We will bear the entire cost of solicitation of proxies, including preparation, assembly and mailing of this proxy statement, the proxy and any additional information furnished to shareholders. Copies of solicitation materials will be furnished to banks, brokerage houses, fiduciaries and custodians holding shares of our common stock in their names that are beneficially owned by others to forward to those beneficial owners. We may reimburse persons representing beneficial owners for their costs of forwarding the solicitation materials to the beneficial owners. Original solicitation of proxies by mail may be supplemented by telephone, facsimile, electronic mail or personal solicitation by our directors, officers or employees. No additional compensation will be paid to our directors, officers or employees for such services. We also intend to retain Mellon Investor Services LLC to assist us in the solicitation of proxies. We anticipate that the costs associated with retaining Mellon Investor Services LLC will not exceed \$15,000. A list of shareholders will be available for inspection by our shareholders at our principal executive offices at 3450 Monte Villa Parkway, Suite 101, Bothell, Washington 98021 beginning two business days after notice of the annual meeting is given and continuing through the meeting.

Shareholder Proposals for the 2012 Annual Meeting

Shareholder proposals submitted for inclusion in our proxy materials for our 2012 annual meeting of shareholders pursuant to Rule 14a-8 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), must be received at our principal executive offices no later than the close of business on January 21, 2012. Shareholders who do not wish to use the mechanism provided by the rules of the Securities and Exchange Commission (the "SEC") in proposing a matter for action at the next annual meeting must notify us in writing of the proposal and the information required by the provisions of our bylaws dealing with advance notice of shareholder proposals and director nominations. To be timely, a shareholder's written notice must be delivered to or mailed and received at our principal executive offices no later than the close of business on February 20, 2012 and no earlier than January 21, 2012.

Attending the Annual Meeting

Our annual meeting will begin promptly at 2:00 p.m., local time, on Monday, June 13, 2011, at the Country Inn, 19333 North Creek Parkway, Bothell, Washington 98011.

Directions to the Country Inn from the Seattle-Tacoma International Airport are as follows:

- 1. Take Washington State Route 518 east and continue onto Interstate 405 heading north;
- 2. Remain on Interstate 405 north for approximately 23 miles;
- 3. Take exit 24 for NE 195th Street toward Beardslee Blvd.;
- 4. Turn right at NE 195th Street;
- 5. Turn right at North Creek Parkway (destination is on the right).

All shareholders should be prepared to present photo identification for admission to the annual meeting. Admission will be on a first-come, first-served basis. If you are a beneficial shareholder and hold your shares in "street name," you will be asked to present proof of ownership of your shares as of the record date. Examples of acceptable evidence of ownership include your most recent brokerage statement showing ownership of shares prior to the record date or a photocopy of your voting instruction form. Persons acting as proxies must bring a valid proxy from a shareholder of record as of the record date. Your late arrival or failure to comply with these procedures could affect your ability to participate in the annual meeting.

Householding of Proxy Materials

We have adopted a procedure approved by the SEC called "householding." Under this procedure, shareholders of record who have the same address and last name and do not participate in electronic delivery of proxy materials will receive only one set of our proxy materials unless one or more of these shareholders notifies us that they wish to continue receiving individual copies. We believe this will provide greater convenience for our shareholders, as well as cost savings for us, by reducing the number of duplicate documents that are sent to your home.

Shareholders who participate in householding will continue to receive separate proxy cards. Householding will not in any way affect your rights as a shareholder.

If you are eligible for householding and currently receive multiple copies of our proxy materials with other shareholders of record with whom you share an address or if you hold stock in more than one account, and in either case you wish to receive only a single copy of these documents for your household, please contact our corporate secretary at 3450 Monte Villa Parkway, Suite 101, Bothell, Washington 98021 at (425) 354-5038.

If you participate in householding and wish to receive a separate copy of our Annual Report on Form 10-K or this proxy statement, or if you do not wish to participate in householding and prefer to receive separate copies of these documents in the future, please contact our corporate secretary at the address or telephone number indicated above and we will promptly deliver to you separate copies of these documents.

Beneficial shareholders can request information about householding from their banks, brokers, or other holders of record.

AVI BIOPHARMA, INC. DIRECTORS AND EXECUTIVE OFFICERS

Directors, Director Nominees and Executive Officers

The following table sets forth certain information with respect to the current directors, director nominees and executive officers of our Company:

| Name | Age | Position(4) |
|----------------------------------|-----|---|
| Executive Officers | | |
| Christopher Garabedian | 44 | President, Chief Executive Officer and Group I Director |
| J. David Boyle II | 57 | Senior Vice President and Chief Financial Officer |
| Graham Johnson, Ph.D. | 60 | Senior Vice President of Preclinical Development and Research |
| Peter Linsley, Ph.D. | 59 | Senior Vice President and Chief Scientific Officer |
| Paul Medeiros | 49 | Senior Vice President of Business Development and Chief Business Officer |
| Stephen Shrewsbury, M.D. | 54 | Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer |
| Effie Toshav | 37 | Senior Vice President, General Counsel and Secretary |
| Non-Employee Directors | | |
| William Goolsbee(1)(2) | 57 | Chairman of the Board of Directors and Group I Director |
| Gil Price, M.D.(2)(3) | 55 | Group I Director |
| Hans Wigzell, M.D., Ph.D. | 72 | Group I Director |
| M. Kathleen Behrens, Ph.D.(1)(3) | 58 | Group II Director |
| Anthony Chase(2)(3) | 56 | Group II Director |
| John Hodgman(1)(2) | 56 | Group II Director |

- (1) Member of the compensation committee.
- (2) Member of the audit committee.
- (3) Member of the nominating and corporate governance committee.
- (4) The terms of Group II Directors expire as of the date of the 2011 annual meeting, and the terms of Group I Directors expire as of the date of the 2012 annual meeting.

Christopher Garabedian, has been a member of our board of directors since June 2010 and our President and Chief Executive Officer since January 2011. Mr. Garabedian served as Vice President of Corporate Strategy for Celgene Corporation, a publicly-traded integrated global biopharmaceutical company, from July 2007 to December 2010, where he was responsible for assessing all potential business development transactions. From November 2005 to June 2007, Mr. Garabedian served as an independent consultant to early-stage biopharmaceutical companies. From 1997 to 1998 and from 1999 to November 2005, Mr. Garabedian worked at Gilead Sciences, Inc., a publicly-traded biopharmaceutical company, where he served in a number of global leadership roles, including as Vice President of Corporate Development, Vice President of Marketing, and Vice President of Medical Affairs. While at Gilead Sciences, Mr. Garabedian's responsibilities included managing corporate development initiatives, including portfolio review and planning, mergers and acquisitions and in-licensing activities, and leading four global product launches. Mr. Garabedian also held various commercial roles at COR Therapeutics, Inc. from 1998 to 1999 and at Abbott Laboratories from 1994 to 1997. He started his biopharmaceutical career as a consultant with Migliara/Kaplan has sociates from 1991 to 1994. Our corporate governance and nominating committee believes that Mr. Garabedian's qualifications for membership on the board of directors include his previous experience serving in leadership positions within the biopharmaceutical industry and his position as our President and Chief Executive Officer. Mr. Garabedian's corporate vision and operational knowledge provide strategic guidance to our management team and our board of directors. Mr. Garabedian received his B.S. in marketing from the University of Maryland.

J. David Boyle II, has served as our Senior Vice President and Chief Financial Officer since August 2008 and served as our Interim Chief Executive Officer and President from April 2010 until December 2010.

Mr. Boyle also previously served as our Secretary from September 2008 to April 2010. In the five years prior to his appointment as Senior Vice President and Chief Financial Officer, Mr. Boyle worked for both XOMA Ltd., a biopharmaceutical company in the field of therapeutic antibody discovery and development, and Polycom, Inc., a worldwide high technology communications company. Mr. Boyle served as Chief Financial Officer of XOMA Ltd. from July 2005 to August 2008. Prior to his position as Chief Financial Officer, Mr. Boyle served as Vice President, Financial Operations of XOMA Ltd. from January 2005 to July 2005. Mr. Boyle joined XOMA Ltd. in January 2005 from Polycom, Inc. where he served from March 2002 to December 2004, most recently, as Vice President, Finance. Mr. Boyle also brings to our company extensive global financial leadership experience in the pharmaceutical industry through previous senior leadership positions. Prior to his employment with Polycom, Inc., Mr. Boyle worked for Salix Pharmaceuticals, Ltd. in the U.S. and for Ares Serono Group both in the U.S. and Switzerland. Mr. Boyle holds a B.A. degree from Catholic University.

Graham Johnson, Ph.D., has served as Senior Vice President of Preclinical Development and Research since August 2010. Prior to joining us, Dr. Johnson held a number of senior leadership positions in both biotech and large pharmaceutical companies and in pharmaceutical consulting. These roles included President of NuPharmAdvise LLC, Chief Research Officer for Rib-X Pharmaceuticals, Vice President of Bristol-Myers Squibb Discovery Chemistry for Connecticut and Canada, and Director of Neuroscience Chemistry for Parke-Davis Pharmaceuticals. Over his 32 year career, Dr. Johnson has worked in such diverse areas as neuroscience, infectious and genitourinary diseases and inflammation. Dr. Johnson is an inventor on more than 54 patents and has co-authored more than 60 peer-reviewed publications. He was a permanent steering committee member and scientific advisor for the Spinomuscular Atrophy Project, an NINDS-sponsored collaborative program to accelerate therapeutics development for spinal muscular atrophy. He is currently an Independent Observer for the European Union's Innovative Medicine Initiative and sits on the scientific advisory board for Galenea Corporation. Dr. Johnson completed his undergraduate studies and earned a Ph.D. from Heriot-Watt University, Edinburgh, and was then awarded a Fulbright Senior Fellowship for postdoctoral study in the U.S., where he joined Professor Sir Jack Baldwin's research group at the Massachusetts Institute of Technology. This was followed by two years of additional postdoctoral study with Professor Sir Derek Barton, first at Imperial College, London, and then at the Research Institute for Medicine and Chemistry in Cambridge, Massachusetts. Dr. Johnson ceased to be an employee and officer of our company effective May 13, 2011.

Peter Linsley, Ph.D., has served as our Senior Vice President and Chief Scientific Officer since May 2011. Dr. Linsley was Chief Scientific Officer of Regulus Therapeutics Inc. from February 2008 to October 2010. Regulus is a biopharmaceutical company created as a joint venture of Alnylam Pharmaceuticals, Inc., and Isis Pharmaceuticals, Inc., to focus on the discovery and development of drug candidates that target microRNAs. While at Regulus, Dr. Linsley led the company's research and development efforts and built a scientific base for some of the first strategic transactions in the microRNA therapeutic arena. From July 2001 to January 2008, he was Executive Director of Cancer Biology at Merck Research Laboratories, where he led efforts to implement RNA interference technologies that culminated in Merck's 2007 acquisition of Sima Therapeutics, Inc. Dr. Linsley originally joined Merck in 2001 when the company acquired Rosetta Inpharmatics, LLC. Dr. Linsley joined Rosetta in September 1997 and held a variety of positions, including Vice President of Research and Development. Prior to Rosetta, Dr. Linsley was at Bristol-Myers Squibb, he held several positions, including Director of Immunology, and co-discovered the co-stimulatory pathway, a discovery that yielded the immunomodulatory drugs abatacept (Orencia) and belatacept and, most recently, the anticancer drug ipilimumab (Yervoy). Dr. Linsley earned his bachelor's degree in Biology from Auburn University, where he graduated magna cum laude, and earned his Ph.D. at the Molecular Biology Institute of the University of California, Los Angeles. Dr. Linsley conducted postdoctoral research in the department of Genetics at the Hospital for Sick Children in Toronto.

Dr. Linsley has participated on the editorial boards of several scientific journals, including the Journal of Immunology, and has published more than 200 scientific articles and has led discoveries that are protected by more than 35 issued U.S. patents.

Paul Medeiros, has served as Senior Vice President of Business Development and Chief Business Officer since May 2009, and served as Secretary from April 2010 to May 2011. In the five years prior to his appointment

as our Senior Vice President of Business Development and Chief Business Officer, Mr. Medeiros worked for Schering-Plough, most recently as Vice President, Global Licensing and Strategic Alliances, where he led worldwide specialty product licensing and strategic partnering initiatives. Mr. Medeiros joined Schering-Plough in 1996 as Marketing Planning Director, and subsequently held senior positions of increasing responsibility in marketing and business development. Prior to Schering-Plough, Mr. Medeiros was employed by Merck & Company, where he held positions in field sales, new product planning and worldwide human health marketing. Mr. Medeiros holds an A.B. with honors from Brown University and an M.B.A. from Columbia Business School. He is a member of the Licensing Executives Society and is a Certified Licensing ProfessionalTM. Mr. Medeiros will cease to be an employee and officer of our company effective June 1, 2011.

Stephen Shrewsbury, M.D., has served as our Chief Medical Officer and Senior Vice President of Preclinical, Clinical and Regulatory Affairs since January 2009. In the five years prior to joining our company, Dr. Shrewsbury worked as a consultant to companies in the pharmaceutical industry from August 2008 to January 2009. Prior to his work as a consultant, Dr. Shrewsbury served as Chief Medical Officer and Senior Vice President, Clinical Development, Medical and Regulatory Affairs of Adamas Pharmaceuticals Inc., a clinical stage pharmaceutical company, from March 2008 to August 2008. He joined Adamas Pharmaceuticals Inc. in March 2008 from MAP Pharmaceuticals Inc., a biopharmaceutical company, where he served from February 2005 to March 2008, most recently as Chief Medical Officer. Prior to his employment with MAP Pharmaceuticals, Inc., Dr. Shrewsbury worked as Senior Director of Clinical Development of Chiron Corporation from July 2002 until February 2005. Prior to joining Chiron, Dr. Shrewsbury held several senior positions at GlaxoSmithKline both in the UK and United States from 1993 until 2002. Dr. Shrewsbury holds a Bachelor of Medicine and a Bachelor of Surgery degree from the University of Liverpool, UK.

Effie Toshav, has served as Senior Vice President and General Counsel since January 2011 and has served as Secretary since May 2011. Prior to joining us, Ms. Toshav was an attorney at the law firm of Wilson Sonsini Goodrich & Rosati from August 2006 to December 2010, most recently as a partner in the firm's life sciences practice where she counseled private and public companies on a variety of legal and business issues. From June 2004 to June 2006, she was general counsel of GlycoFi, a biotechnology company specializing in protein-based therapeutics, and had responsibility for legal and general corporate matters, the structure and execution of strategic alliances with major pharmaceutical companies and the management of the company's extensive intellectual property portfolio. Ms. Toshav also played a significant role in the \$400 million sale of GlycoFi to Merck in June 2006. Prior to GlycoFi, Ms. Toshav was senior corporate counsel at Protein Design Labs, predecessor of Facet Biotech. She received a B.A. in political science from Stanford University and a J.D. from Cornell Law School.

William Goolsbee, has served as a member of our board of directors since October 2007 and as chairman of the board of directors since June 2010. He also serves as the chairman of the compensation committee and as a member of the audit committee. Mr. Goolsbee was founder, chairman and Chief Executive Officer of Horizon Medical Inc. from 1987 until its acquisition by a unit of UBS Private Equity in 2002. Mr. Goolsbee was a founding director of ImmunoTherapy Corporation in 1993, becoming chairman of the board in 1995, a position he held until overseeing the successful acquisition of ImmunoTherapy by us in 1998. His experience prior to 1987 includes a series of increasingly responsible executive positions with CooperVision Inc. and Cooper Laboratories Inc. Our nominating and corporate governance committee believes that Mr. Goolsbee's 30-year career in the medical device and biopharmaceutical industries qualifies him for service as a member of the board of directors. Mr. Goolsbee holds a B.A. degree from the University of California at Santa Barbara. Mr. Goolsbee serves as chairman of privately held BMG Pharma LLC, a product development and licensing company.

Gil Price, M.D., has served as a member of our board of directors since October 2007. He also serves as the chairman of the nominating and corporate governance committee and as a member of the audit committee. Dr. Price is a clinical physician trained in internal medicine with a long-standing interest in drug development, adverse drug reactions, drug utilization and regulation. Since 2002, he has been the Chief Executive Officer and Chief Medical Officer of Drug Safety Solutions, a provider of solutions for clinical and drug safety operations.

From 1997 to 2002, Dr. Price was the director of clinical development for oncology at MedImmune, Inc., the biologics subsidiary of AstraZeneca. Prior to joining MedImmune, Dr. Price worked in the contract research organization sector. Dr. Price began his pharmaceutical career at GlaxoSmithKline Inc., where he worked for nearly nine years on both the commercial and research sides of that company. Dr. Price is a member of the American Medical Association, the Academy of Pharmaceutical Physicians and a past member of the American Society for Microbiology. Our nominating and corporate governance committee believes that Dr. Price's experience in the clinical, research and commercial sectors in the fields of medicine and pharmaceuticals qualifies him for service as a member of the board of directors. Dr. Price received a B.A. from the University of Rio Grande and a M.D. from the University of Santiago.

Hans Wigzell, M.D., Ph.D., has served as a member of our board of directors since June 2010. In the past five years, Dr. Wigzell has served as a director of Probi AB and Diamyd Medical AB and currently serves as a director of RaySearch Laboratories AB, Biovitrum AB, and Intercell AG. Previously he was the president of the Karolinska Institute, a medical university, from 1995 to 2003, and was general director of the National Bacteriological Laboratory in Stockholm from 1987 to 1993. Dr. Wigzell is chairman of the board of the Stockholm School of Entrepreneurship. He is an elected member of several national academies, including the Swedish Royal Engineering Academy, Sweden; the Royal Academy of Science, Sweden; the Danish Academy of Arts and Letters; the American Academy of Arts and Sciences; the Finnish Science Society; and the European Molecular Biology Organization. In addition to serving as president of the Karolinska Institute, his academic career includes being Chairman, Nobel Prize Committee, Karolinska Institute and Distinguished External Advisory Professor, Ehime University, Japan. Additionally, Dr. Wigzell was appointed Chairman of the Nobel Assembly in 2000. Our nominating and corporate governance committee believes that Dr. Wigzell's experience serving in leadership roles in various scientific and biotechnology institutions and companies in countries around the world qualifies him to serve as a member of the board of directors. He holds an M.D. and Ph.D. degree from the Karolinska Institute in Stockholm and he has received honorary doctors degrees at University "Tor Vergata" in Rome, Italy and Turku University in Finland.

M. Kathleen Behrens, Ph.D., has served as a member of our board of directors since March 2009. She also serves as a member of the nominating and corporate governance committee and the compensation committee. Dr. Behrens served as a member of the President's Council of Advisors on Science and Technology ("PCAST") from 2001 to early 2009 and as chairwoman of PCAST's Subcommittee on Personalized Medicine. She has served as a public-market biotechnology securities analyst as well as venture capitalist focusing on healthcare, technology and related investments. She was instrumental in the founding of several biotechnology companies including Protein Design Labs, Inc. and COR Therapeutics, Inc. She worked for Robertson Stephens & Co. from 1983 through 1996, serving as a general partner and managing director. Dr. Behrens continued in her capacity as a general partner for selected venture funds for RS Investments from 1996 through 2009, after management led a buyout of that firm from Bank of America. From 1997 to 2005, she was a director of the Board on Science, Technology and Economic Policy for the National Research Council, and from 1993 to 2000 she was a director, president, and chairwoman of the National Venture Capital Association. Dr. Behrens is also a director of Amylin Pharmaceuticals, Inc. and, in the past five years, has served as a director of Abgenix, Inc. Our nominating and corporate governance committee believes that Dr. Behrens' significant experience in the financial services and biotechnology sectors, as well as in healthcare policy, qualifies her for service as a member of the board of directors. Dr. Behrens holds a B.S. in Biology and a Ph.D. in Microbiology from the University of California, Davis.

Anthony Chase, has served as a member of our board of director since April 2010. He also serves as a member of the audit committee and the nominating and corporate governance committee. Mr. Chase serves as chairman of ChaseSource, L.P., a position he has held since October 2006, and ChaseSource Real Estate Services, L.P., a position he has held since January 2008. Previously, he was Chairman and Chief Executive Officer of ChaseCom, L.P. from January 1997 to December 2007, when ChaseCom, L.P. was acquired by AT&T. Mr. Chase is a tenured Professor at the University of Houston Law Center where he began teaching in 1990. Mr. Chase is a member of the American Bar Association and State Bar of Texas. Mr. Chase is a director of

Western Gas Partners (NYSE) and, in the past five years, has served as a director of the Cornell Companies, Inc. He is a member of the Council on Foreign Relations. Our nominating and corporate governance committee believes that Mr. Chase's experience in leadership positions in public companies qualifies him for service as a member of the board of directors. Mr. Chase received an A.B., with honors, from Harvard College, received a J.D. from Harvard Law School, and received an M.B.A. from Harvard Business School.

John Hodgman, has served as a member of our board of directors since March 2004. He also serves as the chairman and financial expert of the audit committee and as a member of the compensation committee. In the past five years, Mr. Hodgman has also served as a director of Inflazyme Pharmaceuticals, Ltd., Alpha Innotech Corporation and Cygnus, Inc. He has served as the Senior Vice President of Finance and Chief Financial Officer of InterMune, Inc., a biotechnology company, since August 2006. He served as the Chairman of Cygnus, Inc., a biopharmaceutical company, from 1999 to 2008, and as President and Chief Executive Officer of that company between 1998 and 2006. Mr. Hodgman joined Cygnus in 1994 as Vice President of Finance and Chief Financial Officer, and between 1995 and 1998, he also served as president of Cygnus Diagnostics. He was President and Chief Executive Officer of Aerogen, Inc., a biopharmaceutical company, from June 2005 to October 2005 when that company was sold to Nektar, Inc. Mr. Hodgman holds a B.S. degree from Brigham Young University and an M.B.A. from the University of Utah. Mr. Hodgman is a director of Immersion Corporation. Our nominating and corporate governance committee believes that Mr. Hodgman's significant executive-level experience as a finance executive with biotechnology and biopharmaceutical companies qualifies him for service as a member of the board of directors.

ELECTION OF AVI BIOPHARMA, INC. DIRECTORS (Proposal 1)

General

As of the date of this proxy statement, our board of directors is composed of seven directors. Our bylaws currently permit a maximum of seven directors. The shareholders or the board of directors may change from time to time the number of directors by amendment of the bylaws, but no decrease in the number of authorized director will have the effect of shortening the term of any incumbent director.

Pursuant to our articles of incorporation, when there are six or more positions on the board of directors, the positions are divided into two equal or nearly equal groups, denoted as Group I and Group II. In even years, shareholders elect directors to fill all Group I positions and in odd years, shareholders elect directors to fill all Group II positions. There is no cumulative voting for election of directors.

The following table sets forth the names of and other information about each of the nominees for election as a Group II director and those directors who will continue to serve after the annual meeting.

| | Age | Director Since | Expiration Of Term | Position(s) Held With AVI |
|-------------------------------|-----|-------------------|-----------------------|------------------------------|
| Group II Director Nominees: | | | | |
| M. Kathleen Behrens, Ph.D. | 58 | 2009 | 2011 | Director |
| Anthony Chase | 56 | 2010 | 2011 | Director |
| John Hodgman | 56 | 2004 | 2011 | Director |
| Group I Continuing Directors: | | | | |
| Christopher Garabedian | 44 | 2010 | 2012 | President, CEO and Director |
| William Goolsbee | 57 | 2007 | 2012 | Chairman of the Board |
| Gil Price, M.D. | 55 | 2007 | 2012 | Director |
| Hans Wigzell, M.D., Ph.D. | 72 | 2010 | 2012 | Director |

Directors for a group whose terms expire at a given annual meeting will be up for re-election for two-year terms at that meeting. Each director's term will continue until the election and qualification of such director's successor, or such director's earlier death, resignation or removal. Any increase or decrease in the number of directors will be distributed among the two groups so that, as nearly as possible, each group will consist of one-half of the directors. This classification of our board of directors may have the effect of delaying or preventing changes in control of management. There are no family relationships among any of our directors or executive officers.

Nominees for Group II Directors Election at the 2011 Annual Meeting of Shareholders

There are three nominees standing for election as Group II directors this year. Based on the report of the nominating and corporate governance committee, our board of directors has approved the nomination of M. Kathleen Behrens, Anthony Chase and John Hodgman for re-election as Group II directors at the 2011 annual meeting. If elected, each of Dr. Behrens and Messrs. Chase and Hodgman will hold office as a Group II director until our 2013 annual meeting of shareholders.

If you sign your proxy or voting instruction card but do not give instructions with respect to the voting of directors, your shares will be voted for the nominees recommended by our board of directors. If you wish to give specific instructions with respect to the voting of directors, you may do so by indicating your instructions on your proxy or voting instruction card. The board of directors expects that the nominees will be available to serve as directors. If Dr. Behrens, Mr. Chase or Mr. Hodgman becomes unavailable, however, the proxy holders intend to vote for any nominee designated by the board of directors, unless the board of directors chooses to reduce the

number of directors serving on the board of directors. If additional persons are nominated for election as directors, the proxy holders intend to vote all proxies received by them in such a manner as to assure the election of Dr. Behrens and Messrs. Chase and Hodgman.

Vote Required and Board of Directors Recommendation

The nominees receiving the greatest number of votes of the shares present and entitled to vote at the annual meeting will be elected as directors.

The board of directors recommends that shareholders vote "FOR" the election of each of Dr. Behrens and Messrs. Chase and Hodgman to the board of directors.

APPROVAL OF THE 2011 EQUITY INCENTIVE PLAN (Proposal 2)

The shareholders are being asked to approve a new 2011 Equity Incentive Plan (the "2011 Plan"). The board of directors has adopted the 2011 Plan, which will be subject to, and effective as of, approval from the shareholders at the annual meeting of shareholders. Our current 2002 Equity Incentive Plan (the "2002 Plan") is scheduled to expire on December 31, 2011. The 2002 Plan, however, will continue to govern awards previously granted under it. Upon expiration of the 2002 Plan, we would have no equity incentive plan under which we may grant future equity awards, unless the 2011 Plan is approved. The board of directors has determined that it is in the best interests of our company and our shareholders to have an equity incentive plan and is asking our shareholders to approve the 2011 Plan.

As of April 18, 2011, we had the following awards outstanding and shares available for grant: (1) 11,086,073 outstanding options with a weighted average exercise price of \$2.1461 per share and weighted average remaining contractual term of 7.61 years, (2) 20,000 unvested restricted stock awards and (3) 2,072,457 shares remaining for grant in the 2002 Plan. Upon shareholder approval of the 2011 Plan, the 2002 Plan will terminate and then remaining share reserves (up to 2,072,457 shares) will become available for grant in the 2011 Plan.

The 2011 Plan's share reserve which the shareholders will be asked to approve is 13,000,000, plus any shares reserved but not issued under the 2002 Plan, up to a maximum of 2,072,457 shares, and shares subject to outstanding awards under the 2002 Plan that expire or otherwise terminate without having been exercised in full, or are forfeited to or repurchased by us, up to a maximum of 11,086,073 shares.

The board of directors believes that we must offer a competitive equity incentive program if we are to continue to successfully attract and retain the best possible candidates for positions of substantial responsibility within our company. The board of directors expects that the 2011 Plan will be an important factor in attracting, retaining and rewarding the high caliber employees' essential to our success and in providing incentive to these individuals to promote the success of our company.

The 2011 Plan is also designed to allow us to deduct in full for federal income tax purposes the compensation recognized by our executive officers in connection with certain awards granted under the 2011 Plan. Section 162(m) of the Internal Revenue Code of 1986, as amended (the "Code"), generally denies a corporate tax deduction for annual compensation exceeding \$1 million paid to the chief executive officer and other "covered employees" as determined under Section 162(m) of the Code and applicable guidance. However, certain types of compensation, including performance-based compensation, are generally excluded from this deductibility limit. To enable compensation in connection with stock options, stock appreciation rights and certain restricted stock grants, restricted stock units, performance shares and performance units awarded under the 2011 Plan to qualify as "performance-based" within the meaning of Code Section 162(m) ("Section 162(m)"), the 2011 Plan limits the sizes of such awards as further described below. By approving the 2011 Plan, the shareholders will be approving, among other things, eligibility requirements for participation in the 2011 Plan, performance measures upon which specific performance goals applicable to certain awards would be based, limits on the numbers of shares or compensation that could be made to participants, and the other material terms of the awards described below.

Summary of the 2011 Plan

The following is a summary of the principal features of the 2011 Plan and its operation. The summary is qualified in its entirety by reference to the 2011 Plan as set forth in Appendix A.

General

The purposes of the 2011 Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide incentives to individuals who perform services for us, and to promote the success of our business. These incentives are provided through the grant of stock options, stock appreciation rights, restricted stock awards, restricted stock units, performance shares and performance units.

Authorized Shares

The 2011 Plan share reserve includes 13,000,000 shares plus any shares reserved but not issued under the 2002 Plan, up to a maximum of 2,072,457 shares, and shares subject to outstanding awards under the 2002 Plan that expire or otherwise terminate without having been exercised in full, or are forfeited to or repurchased by us, up to a maximum of 11,086,073 shares.

If an award expires or becomes unexercisable without being exercised in full, such shares will become available for further grant under the 2011 Plan. If shares issued pursuant to restricted stock, restricted stock units, performance shares or performance units are repurchased by or forfeited to us due to failure to vest, such shares will become available for future grant under the 2011 Plan. Upon the exercise of a stock appreciation right settled in shares, the gross number of shares covered by the portion of the award exercised will cease to be available under the 2011 Plan. Shares used to pay the exercise price or purchase price of an award and/or to satisfy the tax withholding obligations of an award will remain available for issuance under the 2011 Plan. Payment of cash rather than shares pursuant to an award will not result in reducing the number of shares available for issuance under the 2011 Plan.

Adjustments to Shares Subject to the 2011 Plan

In the event of any dividend or other distribution (whether in the form of cash, shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, exchange of shares or other of our securities, or other change in our corporate structure affecting our common stock, the Administrator (as defined below), in order to prevent diminution or enlargement of the benefits or potential benefits intended to be available under the 2011 Plan, will adjust the number and class of shares that may be delivered under the 2011 Plan, and/or the number, class and price of shares of stock subject to outstanding awards, and the award grant limitations.

Administration

The 2011 Plan will be administered by the board of directors or a committee of individuals satisfying applicable laws appointed by the board of directors (the "Committee"). To make grants to certain officers and key employees of our company, the members of the Committee must qualify as "non-employee directors" under Rule 16b-3 of the Securities Exchange Act of 1934. In the case of awards intended to qualify for the performance-based compensation exemption under Section 162(m), administration must be by a compensation committee comprised solely of two or more "outside directors" within the meaning of Section 162(m). (For purposes of this summary of the 2011 Plan, the term "Administrator" will refer to either the Committee or the board of directors.)

Subject to the terms of the 2011 Plan, the Administrator has the sole discretion to select the employees, consultants, and directors who will receive awards, to determine the terms and conditions of awards, to modify or amend each award (subject to the restrictions of the 2011 Plan), including to accelerate vesting or waive forfeiture restrictions, and to interpret the provisions of the 2011 Plan and outstanding awards. The Administrator may allow a participant to defer the receipt of payment of cash or delivery of shares that otherwise would be due to such participant. The Administrator may make rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws or qualifying for favorable tax treatment under applicable foreign laws and may make all other determinations deemed necessary or advisable for administering the 2011 Plan.

Notwithstanding the foregoing, the Administrator cannot (i) modify or amend an option or a stock appreciation right to reduce the exercise price of such option or stock appreciation right after it has been granted (other than pursuant to certain changes in our capitalization), or (ii) cancel any outstanding option or stock appreciation right and immediately replace it with any other award with a lower exercise price, unless such action is approved by our shareholders before such action is taken. Also, the Administrator may not authorize the buyout of awards with exercise prices per share less than the then-current per share fair market value without the prior consent of our shareholders.

Eligibility

Awards may be granted to our employees, directors and consultants and employees and consultants of any of our affiliates. Incentive stock options may be granted only to employees who, as of the time of grant, are employees of our company or any parent or subsidiary corporation of our company. As of April 15, 2011, we had approximately 111 employees, including four named executive officers, and six non-employee directors, who would be eligible to participate in the 2011 Plan. Our number of active consultants varies, but only two consultants typically receive equity awards.

Stock Options

Each option granted under the 2011 Plan will be evidenced by a written agreement between us and such participant specifying the number of shares subject to the option and the other terms and conditions of the option, consistent with the requirements of the 2011 Plan.

The exercise price per share of each option may not be less than the fair market value of a share of common stock on the date of grant. However, any incentive stock option granted to a person who at the time of grant owns stock possessing more than 10% of the total combined voting power of all classes of stock of our company or any parent or subsidiary corporation of our company (a "Ten Percent Shareholder") must have an exercise price per share equal to at least 110% of the fair market value of a share on the date of grant. Generally, the fair market value of the common stock is the closing sales price per share on the date of grant as quoted on The NASDAQ Global Market. On May 13, 2011, the closing price of our common stock on The NASDAQ Global Market was \$1.82 per share.

The 2011 Plan provides that the option exercise price may be paid, as determined by the Administrator, in cash, by check, by tender of shares having a fair market value not less than the exercise price, by the assignment of the proceeds of a sale with respect to some or all of the shares being acquired upon the exercise of the option (a "cashless exercise"), by a net exercise, by a reduction in any Company liability to the participant, by any combination of the foregoing, or by such other consideration and method of payment for the issuance of shares to the extent permitted by applicable laws. An option will be deemed exercised when we receive the notice of exercise and full payment for the shares to be exercised, together with applicable tax withholdings.

Options will be exercisable at such times or under such conditions as determined by the Administrator and set forth in the award agreement. The maximum term of an option will be specified in the award agreement, provided that options will have a maximum term of ten years, and provided further that an incentive stock option granted to a Ten Percent Shareholder must have a term not exceeding five years.

The Administrator will determine and specify in each written award agreement, and solely in its discretion, the period of post-termination exercise applicable to each option. In the absence of such a determination by the Administrator, the participant generally will be able to exercise his or her option for (i) three months following his or her termination for reasons other than death or disability, and (ii) 12 months following his or her termination due to death or disability. An award agreement may also provide that if exercising an option following termination of a participant's service (other than upon death or disability) would result in liability under Section 16(b) of the Securities Exchange Act of 1934, as amended ("Section 16(b)"), then the option will

terminate 10 days after the last date on which exercise would result in liability under Section 16(b). An award agreement may also provide that if exercising an option following termination of a participant's service (other than upon death or disability) would be prohibited solely due to a violation of registration requirements under the Securities Act of 1933, as amended, then the option will terminate three months after termination of the participant's service during which exercising the option would not violate such registration requirements. However, in no event can an option be exercised after the expiration of the term of the option.

Stock Appreciation Rights

A stock appreciation right gives a participant the right to receive the appreciation in the fair market value of our common stock between the date of grant of the award and the date of its exercise. Each stock appreciation right granted under the 2011 Plan will be evidenced by a written agreement between us and the participant specifying the exercise price and the other terms and conditions of the award, consistent with the requirements of the 2011 Plan.

The exercise price per share of each stock appreciation right may not be less than the fair market value of a share of our common stock on the date of grant. We may pay the appreciation in cash, in shares, or in some combination thereof. The term of a stock appreciation right will be no more than 10 years from the date of grant. A stock appreciation right will be deemed exercised when we receive the notice of exercise and full payment for the shares to be exercised, together with applicable tax withholdings. Additionally, the terms and conditions relating to the period of post-termination exercise with respect to options described above also apply to stock appreciation rights.

Restricted Stock Awards

Awards of restricted stock are rights to acquire or purchase shares, which vest in accordance with the terms and conditions established by the Administrator in its sole discretion. Each restricted stock award granted will be evidenced by a written agreement between us and the participant specifying the number of shares subject to the award and the other terms and conditions of the award, consistent with the requirements of the 2011 Plan. Restricted stock awards may be subject to vesting conditions as the Administrator specifies, and the shares acquired may not be transferred by the participant until vested. Unless otherwise provided by the Administrator, a participant will forfeit any shares of restricted stock as to which the restrictions have not lapsed prior to the participant's termination of service. Participants holding restricted stock will have the right to vote the shares and to receive any dividends paid, except that dividends or other distributions paid in shares will be subject to the same restrictions as the original award. The Administrator may, in its sole discretion, reduce or waive any restrictions and may accelerate the time at which any restrictions will lapse or be removed.

Restricted Stock Units

The Administrator may grant restricted stock units which represent a right to receive shares at a future date as set forth in the participant's award agreement. Each restricted stock unit granted under the 2011 Plan will be evidenced by a written agreement between us and the participant specifying the number of shares subject to the award and other terms and conditions of the award, consistent with the requirements of the 2011 Plan. Restricted stock units will result in a payment to a participant only if the performance goals or other vesting criteria the Administrator may establish are achieved or the awards otherwise vest. Earned restricted stock units will be paid, in the sole discretion of the Administrator, in the form of cash, shares, or in a combination thereof. The Administrator may establish vesting criteria in its discretion, which may be based on company-wide, divisional or individual goals, or any other basis and which may include the performance goals listed below, and which, depending on the extent to which they are met, will determine the number of restricted stock units to be paid out to participants.

After the grant of a restricted stock unit award, the Administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout and may accelerate the time at which any restrictions will lapse or be removed. A participant will forfeit any unearmed restricted stock units as of the date set forth in the award agreement.

Performance Units and Performance Shares

Performance units and performance shares may also be granted under the 2011 Plan. Each award of performance shares or units granted under the 2011 Plan will be evidenced by a written agreement between us and the participant specifying the performance period and other terms and conditions of the award, consistent with the requirements of the 2011 Plan. Performance units and performance shares will result in a payment to a participant only if the performance goals or other vesting criteria the Administrator may establish are achieved or the awards otherwise vest. Earned performance units and performance shares will be paid, in the sole discretion of the Administrator, in the form of cash, shares, or in a combination thereof. The Administrator may establish performance objectives in its discretion, which may be based on company-wide, divisional or individual goals, applicable federal or state securities laws, or any other basis and which may include the performance goals listed below, and which, depending on the extent to which they are met, will determine the number and/or the value of performance units and performance shares to be paid out to participants.

After the grant of a performance unit or performance share, the Administrator, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such performance units or shares and accelerate the time at which any restrictions will lapse or be removed. Performance units will have an initial value established by the Administrator on or before the date of grant. Performance shares will have an initial value equal to the fair market value of a share of our common stock on the grant date. A participant will forfeit any performance shares or units that are unearned or unvested as of the date set forth in the award agreement.

Performance Goals

Awards of restricted stock, restricted stock units, performance shares, performance units and other incentives under the 2011 Plan may be made subject to the attainment of performance goals relating to one or more business criteria within the meaning of Code Section 162(m) and may provide for a targeted level or levels of achievement including: attainment of research and development milestones, bookings, business divestitures and acquisitions, cash flow, cash position, contract awards or backlog, customer renewals, customer retention rates from an acquired company, business unit or division, earnings (which may include earnings before interest and taxes, earnings before taxes and net earnings), earnings per share, expenses, gross margin, growth in shareholder value relative to the moving average of the S&P 500 Index or another index, internal rate of return, market share, net income, net profit, net sales, new product development, new product invention or innovation, number of customers, operating cash flow, operating expenses, operating income, operating margin, overhead or other expense reduction, product defect measures, product release timelines, productivity, profit, return on assets, return on capital, return on equity, return on investment, return on sales, revenue, revenue growth, sales results, sales growth, stock price, time to market, total shareholder return, and working capital. The performance goals may differ from participant to participant and from award to award, may be used to measure the performance of our company as a whole or a business unit or other segment of our company, or one or more product lines or specific markets and may be measured relative to a peer group or index. Any criteria used may be measured in absolute terms or in terms of growth, compared to other companies, measured against the market as a whole and/or according to applicable market indices, measured against our company as a whole or a segment of our company, and/or measured on a pre-tax or post-tax basis, if applicable

To the extent necessary to comply with the performance-based compensation provisions of Code Section 162(m), with respect to any award granted subject to performance goals, within the first 25% of the

performance period, but in no event more than ninety days following the commencement of any performance period (or such other time as may be required or permitted by Code Section 162(m)), the Administrator will, in writing: (i) designate one or more participants to whom an award will be made, (ii) select the performance goals applicable to the performance period, (iii) establish the performance goals, and amounts of such awards, as applicable, which may be earned for such performance period, and (iv) specify the relationship between performance goals and the amounts of such awards, as applicable, to be earned by each participant for such performance period. Following the completion of each performance period, the Administrator will certify in writing whether the applicable performance goals have been achieved for such performance period. In determining the amounts earned by a participant, the Administrator may reduce or eliminate (but not increase) the amount payable at a given level of performance to take into account additional factors that the Administrator may deem relevant to the assessment of individual or corporate performance for the performance period. A participant will be eligible to receive payment pursuant to an award for a performance period only if the performance goals for such period are achieved.

Individual Award Limitations

The 2011 Plan contains annual grant limits intended to satisfy Section 162(m). Specifically, the maximum number of shares which could be issued to any one individual in any year (i) pursuant to options is 1,000,000 shares, (ii) pursuant to stock appreciation rights is 1,000,000 shares, (iii) pursuant to restricted stock is 500,000 shares, (iv) pursuant to restricted stock units is 500,000 shares, and (iv) pursuant to performance shares is 500,000 shares, and (v) the maximum dollar value which could be issued to any one individual in any year pursuant to the grant of performance units is \$1,700,000. In addition, in connection with his or her initial hiring with our company, an individual may be granted additional awards of up to a maximum of (a) 1,000,000 shares covering options, (b) 1,000,000 shares covering stock appreciation rights, (c) 500,000 shares covering restricted stock, (d) 500,000 shares covering restricted stock units. (e) 500,000 shares covering performance units.

The Administrator will adjust the share limitations of (i)-(iv) in the above paragraph in the event of any adjustment to our shares discussed above under "Adjustments to Shares Subject to the 2011 Plan."

Transferability of Awards

Awards granted under the 2011 Plan generally are not transferable, and all rights with respect to an award granted to a participant generally will be available during a participant's lifetime only to the participant.

Dissolution or Liquidation

In the event of our proposed dissolution or liquidation, the Administrator will notify each participant in writing as soon as practicable prior to the effective date of such proposed transaction. An award will terminate immediately prior to consummation of such proposed action to the extent the award has not been previously exercised.

Change in Control

The 2011 Plan provides that, in the event of a merger or our "change in control" (as defined in the 2011 Plan), the Administrator will have authority to determine the treatment of outstanding awards, including, without limitation, that

- · awards be assumed or substantially equivalent awards substituted by the acquiring or succeeding corporation or its affiliate;
- · awards will terminate upon or immediately prior to consummation of such transaction, upon providing written notice to the participant;

- outstanding awards will vest and become exercisable, realizable, or payable, or restrictions applicable to an award will lapse, in whole or in part prior to or upon such transaction and, to the extent the Administrator determines, terminate upon or immediately prior to the effectiveness of the transaction:
- an award terminates in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon exercise of the award or realization of the participant's rights as of the date of the transaction, or an award be replaced with other rights or property selected by the Administrator in its sole discretion; or
- any combination of the foregoing.

If the successor corporation does not assume or substitute outstanding awards, the options and stock appreciation rights will become fully vested and exercisable, all restrictions on restricted stock, restricted stock units, performance shares and performance units will lapse, and, with respect to awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met. The Administrator will not be required to treat all outstanding awards the same in the transaction. In addition, if an option or stock appreciation right is not assumed or substituted for in the event of a change in control, the Administrator will notify the participant in writing or electronically that the option or stock appreciation right will be fully vested and exercisable for a period of time determined by the Administrator in its sole discretion, and the option or stock appreciation right will terminate upon the expiration of such period.

Termination or Amendment

The 2011 Plan will automatically terminate 10 years from the date of its adoption, unless terminated at an earlier time by the Administrator. The Administrator may terminate or amend the 2011 Plan at any time, provided that no amendment may be made without shareholder approval to the extent approval is necessary or desirable to comply with any applicable laws. No termination or amendment may impair the rights of any participant unless mutually agreed otherwise between the participant and the Administrator.

Summary of U.S. Federal Income Tax Consequences

The following summary is intended only as a general guide to the material U.S. federal income tax consequences of participation in the 2011 Plan. The summary is based on existing U.S. laws and regulations, and there can be no assurance that those laws and regulations will not change in the future. The summary does not purport to be complete and does not discuss the tax consequences upon a participant's death, or the provisions of the income tax laws of any municipality, state or foreign country in which the participant may reside. As a result, tax consequences for any particular participant may vary based on individual circumstances.

Incentive Stock Options

An optionee recognizes no taxable income for regular income tax purposes as a result of the grant or exercise of an incentive stock option qualifying under Section 422 of the Code. Optionees who neither dispose of their shares within two years following the date the option was granted nor within one year following the exercise of the option normally will recognize a capital gain or loss equal to the difference, if any, between the sale price and the purchase price of the shares. If an optionee satisfies such holding periods upon a sale of the shares, we will not be entitled to any deduction for federal income tax purposes. If an optionee disposes of shares within two years after the date of grant or within one year after the date of exercise (a "disqualifying disposition"), the difference between the fair market value of the shares on the exercise date and the option exercise price (not to exceed the gain realized on the sale if the disposition is a transaction with respect to which a loss, if sustained, would be recognized) will be taxed as ordinary income at the time of disposition. Any gain in excess of that amount will be a capital gain. If a loss is recognized, there will be no ordinary income, and such loss will be a capital loss. Any ordinary income recognized by the optionee upon the disqualifying disposition of

the shares generally should be deductible by us for federal income tax purposes, except to the extent such deduction is limited by applicable provisions of the Code.

The difference between the option exercise price and the fair market value of the shares on the exercise date is treated as an adjustment in computing the optionee's alternative minimum taxable income and may be subject to an alternative minimum tax which is paid if such tax exceeds the regular tax for the year. Special rules may apply with respect to certain subsequent sales of the shares in a disqualifying disposition, certain basis adjustments for purposes of computing the alternative minimum taxable income on a subsequent sale of the shares and certain tax credits which may arise with respect to optionees subject to the alternative minimum tax.

Nonstatutory Stock Options

Options not designated or qualifying as incentive stock options will be nonstatutory stock options having no special tax status. An optionee generally recognizes no taxable income as the result of the grant of such an option. Upon exercise of a nonstatutory stock option, the optionee normally recognizes ordinary income equal to the amount that the fair market value of the shares on such date exceeds the exercise price. If the optionee is an employee, such ordinary income generally is subject to withholding of income and employment taxes. Upon the sale of stock acquired by the exercise of a nonstatutory stock option, any gain or loss, based on the difference between the sale price and the fair market value on the exercise date, will be taxed as capital gain or loss. No tax deduction is available to us with respect to the grant of a nonstatutory stock option or the sale of the stock acquired pursuant to such grant.

Stock Appreciation Rights

In general, no taxable income is reportable when a stock appreciation right is granted to a participant. Upon exercise, the participant will recognize ordinary income in an amount equal to the fair market value of any shares of our common stock received. Any additional gain or loss recognized upon any later disposition of the shares would be capital gain or loss.

Restricted Stock Awards

A participant acquiring restricted stock generally will recognize ordinary income equal to the fair market value of the shares on the vesting date. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. The participant may elect, pursuant to Section 83(b) of the Code, to accelerate the ordinary income tax event to the date of acquisition by filing an election with the Internal Revenue Service no later than 30 days after the date the shares are acquired. Upon the sale of shares acquired pursuant to a restricted stock award, any gain or loss, based on the difference between the sale price and the fair market value on the date the ordinary income tax event occurs, will be taxed as capital gain or loss.

Restricted Stock Unit Awards

There are no immediate tax consequences of receiving an award of restricted stock units. A participant who is awarded restricted stock units will be required to recognize ordinary income in an amount equal to the fair market value of shares issued to such participant at the end of the applicable vesting period or, if later, the settlement date elected by the Administrator or a participant. Any additional gain or loss recognized upon any later disposition of any shares received would be capital gain or loss.

Performance Shares and Performance Unit Awards

A participant generally will recognize no income upon the grant of a performance share or a performance unit award. Upon the settlement of such awards, participants normally will recognize ordinary income in the year of receipt in an amount equal to the cash received and the fair market value of any cash or nonrestricted shares

received. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. Upon the sale of any shares received, any gain or loss, based on the difference between the sale price and the fair market value on the date the ordinary income tax event occurs, will be taxed as capital gain or loss.

Section 409A

Section 409A of the Code provides certain new requirements for non-qualified deferred compensation arrangements with respect to an individual's deferral and distribution elections and permissible distribution events. Awards granted under the 2011 Plan with a deferral feature will be subject to the requirements of Section 409A of the Code. If an award is subject to and fails to satisfy the requirements of Section 409A of the Code, the recipient of that award may recognize ordinary income on the amounts deferred under the award, to the extent vested, which may be prior to when the compensation is actually or constructively received. Also, if an award that is subject to Section 409A fails to comply with Section 409A's provisions, Section 409A imposes an additional 20% federal income tax on compensation recognized as ordinary income, as well as interest on such deferred compensation.

Tax Effect for the Company

We generally will be entitled to a tax deduction in connection with an award under the 2011 Plan in an amount equal to the ordinary income realized by a participant and at the time the participant recognizes such income (for example, the exercise of a nonstatutory stock option). Special rules limit the deductibility of compensation paid to our Chief Executive Officer and other "covered employees" as determined under Section 162(m) and applicable guidance.

Number of Awards Granted to Employees, Consultants, and Directors

The number of awards that an employee, director or consultant may receive under the 2011 Plan is in the discretion of the Administrator and therefore cannot be determined in advance. The following table sets forth (i) the aggregate number of shares of common stock subject to options granted under the 2002 Plan during the last year, (ii) the average per share exercise price of such options, (iii) the aggregate number of shares issued pursuant to awards of restricted stock granted under the 2002 Plan during the last year, and (iv) the dollar value of such shares based on \$2.12 per share, the closing price of our common stock on December 31, 2010.

| Name of Individual or Group | Number of Options Granted | | | Number of Shares subject to Restricted Stock Grants | Dollar Value of Shares subject to Restricted Stock Grants | |
|--|------------------------------|----|------|--|--|--|
| J. David Boyle II, Former Interim President and Chief Executive Officer and Current Senior | | | | | | |
| Vice President and Chief Financial Officer | 330,000 | \$ | 1.37 | _ | _ | |
| Paul Medeiros, Senior Vice President of Business Development and Chief Business Officer | 205,000 | \$ | 1.52 | _ | _ | |

| Name of Individual or Group | Number of Options Average Per Share Granted Exercise Price | | | Number of Shares subject to Restricted Stock Grants | Dollar Value of Shares subject to Restricted Stock Grants | |
|--|--|----|------|--|--|--------|
| Stephen Shrewsbury, M.D., Senior | | | | | | |
| Vice President of Preclinical, Clinical and Regulatory Affairs | | | | | | |
| and Chief Medical Officer | 205,000 | \$ | 1.52 | _ | | _ |
| Graham Johnson, Ph.D., Senior Vice President of Preclinical Development and Research | 400,000 | \$ | 2.03 | _ | | _ |
| Leslie Hudson, Ph.D., Former President and Chief Executive | | | | | | |
| Officer | 600,000 | \$ | 1.45 | <u> </u> | | _ |
| All executive officers, as a group | 1,740,000 | \$ | 1.59 | _ | | _ |
| All directors who are not executive officers, as a group | 300,000 | \$ | 1.29 | 20,000 | \$ | 42,400 |
| All employees who are not executive officers, as a group | 1,562,365 | \$ | 1.64 | _ | | _ |

Vote Required and Board of Directors Recommendation

The proposal will be approved if the votes cast in favor of this proposal exceed the votes cast against this proposal.

The board of directors recommends that shareholders vote "FOR" approval of the adoption of the 2011 Equity Incentive Plan.

ADVISORY VOTE ON EXECUTIVE COMPENSATION (Proposal 3)

In accordance with Section 14A of the Exchange Act, we are asking our shareholders to cast an advisory vote to approve the 2010 compensation of our named executive officers as disclosed in this proxy statement. This proposal, commonly known as a "say-on-pay" proposal, gives our shareholders the opportunity to express their views on the design and effectiveness of our executive compensation program.

As described in detail under the section below captioned "Compensation Discussion and Analysis," our executive compensation program is designed to attract and retain senior executive management, to motivate their performance toward clearly defined goals, and to align their long term interests with those of our shareholders. We urge our shareholders to read the "Compensation Discussion and Analysis" and the tables and narrative that follow for additional details about our executive compensation program, including information about the 2010 compensation paid to our named executive officers.

As we describe in our Compensation Discussion and Analysis, our executive compensation program includes a significant pay-for-performance component that supports our business strategy and aligns the interests of our executives with our shareholders. In particular, our compensation program rewards financial, strategic and operational performance and the goals set for each performance category support our long-range plans. In light of the achievement of several milestones in 2010, we believe that the compensation paid to our named executive officers was appropriate. Highlights of our 2010 performance include:

- · contracts totaling more than \$300 million for the research of select therapeutic candidates for Ebola, Marburg and influenza viruses;
- · recruitment of additional personnel to aid in the execution of our contracts with the U.S. government; and
- encouraging results from our Phase Ib/II trial in AVI-4658, our lead product candidate for the treatment of Duchenne muscular dystrophy.

In addition, to discourage excessive risk taking, our compensation committee maintains discretion to increase or decrease any incentive plan compensation, allowing the committee to consider the circumstances surrounding individual performance and adjust payments accordingly. Additionally, multi-year vesting for long-term equity incentive awards discourages an inappropriate focus on short-term results at the risk of long-term, sustained performance.

2010 Compensation Program Highlights

As discussed in more detail under the section below captioned "Compensation Discussion and Analysis," we believe that our executive compensation program is reasonable, competitive and strongly focused on pay-for-performance principles. The compensation committee measures performance and sets goals and objectives on the basis of corporate and individual results that it believes will position us for long-term sustainable success. We believe that the 2010 compensation of our named executive officers was appropriate and aligned with our 2010 results. Our 2010 compensation program highlights are set forth below.

- A majority of the total compensation paid to our named executive officers was in the form of variable or "at risk" compensation. Variable compensation is tied to the achievement of our performance goals (annual cash incentive bonus) or stock price appreciation (long-term equity incentives).
- We continue to emphasize stock options as a key element of our compensation program, so that our named executive officers are rewarded when our stock price increases.
- Based on our 2010 results, on average our named executive officers received 78% of their target cash incentive bonus awards.

• Our named executive officers were not provided with any "executive perquisites," and were only provided with minimal perquisites that were also provided to all of our regular full-time employees.

The compensation committee regularly reviews the compensation program for our executives to ensure they achieve the desired goals of aligning our executive compensation structure with our shareholders' interests and current market practices. We believe that our executive compensation program has been effective at encouraging the achievement of positive results, appropriately aligning pay and performance, and in enabling us to attract and retain talented executives.

Advisory Vote and Board Recommendation

We request shareholder approval of the 2010 compensation of our named executive officers as disclosed in this proxy statement pursuant to the SEC's compensation disclosure rules (which disclosure includes the "Compensation Discussion and Analysis," the compensation tables, and the narrative disclosures that accompany the compensation tables within this proxy statement). This vote is not intended to address any specific element of compensation, but rather the overall compensation of our named executive officers and the compensation philosophy, policies and practices described in this proxy statement.

Accordingly, we ask that you vote "FOR" the following resolution at this meeting:

"RESOLVED, that the shareholders of AVI BioPharma, Inc. approve, on an advisory basis, the compensation of the named executive officers, as disclosed in AVI BioPharma, Inc.'s Amendment No.1 to its Annual Report on Form 10-K and proxy statement for the 2011 Annual Meeting of Shareholders pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the Compensation Discussion and Analysis, the 2010 Summary Compensation Table, and the other related tables and disclosure within Amendment No.1 to its Annual Report on Form 10-K and proxy statement."

You may vote "FOR," "AGAINST," or "ABSTAIN" from the proposal to approve the compensation of our named executive officers. As an advisory vote, the outcome of the vote on this proposal is not binding upon us.

Vote Required and Board of Directors Recommendation

Because this proposal asks for a non-binding, advisory vote, there is no "required vote" that would constitute approval. We value the opinions expressed by our shareholders in this advisory vote, and our compensation committee, which is responsible for overseeing and administering our executive compensation programs, will consider the outcome of the vote when designing our compensation programs and making future compensation decisions for our named executive officers. Abstentions and broker non-votes, if any, will not have any effect on the results of those deliberations.

The board of directors recommends that shareholders vote "FOR" the compensation of our named executive officers.

ADVISORY VOTE ON FREQUENCY OF ADVISORY VOTE ON EXECUTIVE COMPENSATION (Proposal 4)

As described in Proposal 3 above, our shareholders are being provided the opportunity to cast an advisory vote on the compensation of our named executive officers, commonly referred to as a "say-on-pay" vote. In accordance with Section 14A of the Exchange Act, this Proposal 4 affords shareholders the opportunity to cast an advisory vote on how often we should include a say-on-pay vote in our proxy materials for future annual shareholder meetings. Under this Proposal 4, shareholders may vote to have the say-on-pay vote every year, every two years, or every three years, or may abstain from voting on this proposal.

Our board of directors believes that a say-on-pay vote should be conducted every three years. As described in the "Compensation Discussion and Analysis" section below, one of the core principles of our executive compensation program is to ensure our executives' interest are aligned with our shareholders' interest to create long-term sustainable value. This principle is exemplified by the compensation committee's focus on long-term incentive compensation. Accordingly, we believe that a triennial vote on our executive compensation program best correlates with our focus on long-term performance and value creation. If there are any concerns about our executive compensation during the interval between "say-on-pay" votes, shareholders are encouraged to bring their concerns to our board of directors or compensation committee at any time. Please refer to the section below captioned "Communications with the Board of Directors," in this proxy for information about communicating with the board of directors

Additionally, a triennial vote will provide us time to thoughtfully respond to shareholder sentiments and implement any necessary changes. We carefully consider changes to our compensation program to ensure consistency and the continued effectiveness of our program. We believe that a triennial vote is an appropriate frequency to provide our compensation committee with sufficient time to thoughtfully consider and implement appropriate changes to our compensation program.

We request that our shareholders select, "Every Three Years" when voting on the frequency of advisory votes on executive compensation.

Vote Required and Board of Directors Recommendation

This proposal also calls for a non-binding, advisory vote. Our board of directors has recommended a vote for every three years. However, if another frequency receives more votes, our board of directors will take that fact into account when making its decision on how often to hold executive compensation advisory votes. Abstentions and broker non-votes, if any, will not have any effect on the results of those deliberations.

The board of directors recommends that shareholders vote for the "Every Three Years" option as the frequency of the advisory vote on executive compensation.

RATIFICATION OF FORM OF INDEMNIFICATION AGREEMENT FOR AVI BIOPHARMA'S DIRECTORS (Proposal 5)

General

On October 4, 2010, the board of directors approved a form of indemnification agreement (the "Indemnification Agreement") and authorized and directed us to enter into the Indemnification Agreement with each of our current executive officers and each of our future executive officers. The shareholders are being asked to ratify the Indemnification Agreement so that we may enter into the Indemnification Agreement with each of our current directors and each of our future directors. A summary of the material terms of the Indemnification Agreement is set forth below and the form of Indemnification Agreement is attached hereto as Appendix B.

The board of directors believes that entry into the Indemnification Agreement with each current and future executive officer and director is in the best interests of our company and our shareholders. The board of directors believes it is extremely important for us to continue to be able to retain and attract responsible and well-qualified individuals to serve as our directors and officers; however, our ability in this regard is threatened by a growing risk of litigation directed against corporate directors and officers generally, and the difficult market for directors' and officers' liability insurance, in which the available coverage is more limited than in the past and the cost of which has increased substantially. The board of directors believes the Indemnification Agreement will enhance our ability to retain and attract well-qualified directors and officers.

Although shareholder ratification of the Indemnification Agreement is not required by law or our articles of incorporation or bylaws, the board of directors considers it appropriate to submit the Indemnification Agreement to our shareholders for their ratification and approval because the directors are potential parties to and the beneficiaries of the rights contained in the Indemnification Agreement. Therefore, the board of directors is submitting the Indemnification Agreement to the shareholders for ratification as a matter of good corporate practice.

If shareholder ratification is not received, we will consider whether or not to enter into the Indemnification Agreement with current and former directors without the receipt of shareholder ratification. Further, our directors would continue to have indemnification rights provided by the Oregon Business Corporation Act (the "OBCA"), our articles of incorporation and our directors' and officers' liability insurance policy, as discussed below in greater detail.

The board of directors believes the Indemnification Agreements serve the best interests of our company and our shareholders by strengthening our ability to attract and retain the services of knowledgeable and experienced persons as directors who, through their efforts and expertise, can make a significant contribution to our success. The Indemnification Agreement is intended to complement the indemnity protection available under applicable law, our articles of incorporation and any policies of insurance we may maintain.

Existing Indemnification and Insurance Protection

Under the OBCA and our articles of incorporation, we have broad powers to indemnify directors and officers against liabilities that they may incur in such capacities.

Section 60.391 of the OBCA authorizes the indemnification of an individual made a party to a proceeding because the individual is or was an officer or director against certain liability incurred in the proceeding if:

- the conduct of the individual was in good faith;
- the individual reasonably believed that his or her conduct was in the best interests of the corporation or at least not opposed to its best interests;

- in the case of any criminal proceeding, the individual had no reasonable cause to believe his or her conduct was unlawful;
- · in the case of any proceeding by or in the right of the corporation, the individual was not adjudged liable to the corporation; and
- in connection with any proceeding (other than a proceeding by or in the right of the corporation) charging improper personal benefit to the individual, the individual was not adjudged liable on the basis that he or she improperly received personal benefit.

Section 60.401 of the OBCA also authorizes a court to order indemnification, whether or not the above standards of conduct have been met, if the court determines that the officer or director is fairly and reasonably entitled to indemnification in view of all the relevant circumstances. In addition, the OBCA provides that the indemnification described above is not exclusive of any other rights to which officers or directors may be entitled under the corporation's articles of incorporation or bylaws, or under any agreement, action of its board of directors, vote of shareholders or otherwise.

Section 60.047(2)(d) of the OBCA also authorizes a corporation to include in its articles of incorporation a provision eliminating or limiting the personal liability of a director to the corporation or its shareholders for monetary damages for conduct as a director, except that such a provision cannot affect the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its shareholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for any unlawful corporate distribution as defined in the OBCA or (iv) for any transaction from which the director derived an improper personal benefit.

Our articles of incorporation provide that we are required to indemnify our directors and officers, in each case to the fullest extent permitted by Oregon law. No amendment to the articles of incorporation that limits our obligation to indemnify any person shall have any effect for any act or omission that occurs prior to the later of the effective date of such amendment and the date notice of such amendment is given to the person. We also maintain directors' and officers' liability insurance.

Material Terms of the Indemnification Agreement

The Indemnification Agreement requires us to indemnify the indemnitee, to the fullest extent permitted by applicable law, against all expenses, judgments, fines and amounts paid in settlement incurred by the indemnitee in connection with any proceeding, whether of a civil, criminal, administrative or investigative nature, in which the indemnitee may be or may have been involved as a party, witness or otherwise, by reason of the fact that indemnitee was a director or officer of our company, or by reason of any action or inaction on indemnitee's part while acting as a director or officer of our company, or by reason of the fact that indemnitee was serving, at the request of our company, in certain capacities for other entities. In addition, the Indemnification Agreement provides for the advancement of expenses, including attorney fees, incurred by the indemnitee in defending against any such proceeding.

The Indemnification Agreement sets out, among other things, the process for determining entitlement to indemnification, the conditions to advancement of expenses, the procedures for enforcement of indemnification rights, the limitations on indemnification and requirements relating to the notice and defense of claims for which indemnification is sought.

The Indemnification Agreement only provides for indemnification for expenses if the indemnitee acted in good faith and in a manner the indemnitee reasonably believed to be in or not opposed to our best interests and, with respect to any criminal proceeding, had no reasonable cause to believe that such indemnitee's conduct was unlawful. No indemnification for expenses will be made under the Indemnification Agreement for any claim as

to which a court of competent jurisdiction has finally adjudged the indemnitee to be liable to us, except to the extent that the court has determined that, despite the adjudication of liability but in view of all the circumstances of the case, the indemnitee is fairly and reasonably entitled to indemnification for such expenses as the court has deemed proper.

The foregoing description is only a summary of certain provisions of the Indemnification Agreement, and is qualified in its entirety by reference to the Indemnification Agreement, which is attached hereto as Appendix B.

Indemnification for Liabilities under the Securities Act of 1933

The SEC has expressed its opinion that indemnification of directors, officers and controlling persons of our company against liabilities arising under the Securities Act of 1933, as amended, is against public policy as expressed in the Securities Act and is, therefore, unenforceable. If a claim for indemnification against such liabilities (other than the payment by us of expenses incurred or paid by a director or officer of our company in the successful defense of the action, suit or proceeding) is asserted by the director or officer in connection with securities which may have been registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by us is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issues.

Vote Required and Board of Directors Recommendation

The proposal will be approved if the votes cast in favor of this proposal exceed the votes cast against this proposal.

The board of directors recommends that shareholders vote "FOR" the ratification of the form of Indemnification Agreement.

ADOPTION OF RESTATED AND AMENDED ARTICLES OF INCORPORATION (Proposal 6)

The board of directors has adopted resolutions approving, declaring advisable and recommending that our shareholders approve the adoption of our Fourth Restated and Amended Articles of Incorporation (the "Restated Articles") to increase the authorized shares of common stock from 200,000,000 to 300,000,000 and to incorporate the First Amendment to the Third Restated and Amended Articles of Incorporation (adopted on August 31, 1998) (the "First Amendment") and the Articles of Amendment to Article 2 of the Third Restated and Amended Articles of Incorporation (adopted on May 15, 2002) (the "Second Amendment" and together with the First Amendment, the "Prior Amendments"). If the adoption of the Restated Articles is approved by our shareholders, the change in our authorized capitalization will become effective upon the filing of the Restated Articles with the Secretary of State of the State of Oregon. We currently plan to file the Restated Articles as soon as reasonably practicable after receiving shareholder approval.

If this proposal is approved, Section 2.1 of Article 2 of the Restated Articles will read as follows:

"2.1 Authorized Capital. The Corporation is authorized to issue two classes of stock which are designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares of stock which the Corporation shall have authority to issue shall be 320,000,000, consisting of 300,000,000 shares of Common Stock, having \$0.0001 par value per share, and 20,000,000 shares of Preferred Stock, having \$0.0001 par value per share."

A copy of the Restated Articles will be filed with the Secretary of State of the State of Oregon. A copy of the Restated Articles incorporating the change in our authorized capitalization and the Prior Amendments is attached to this Proxy Statement as Appendix C.

Purpose and Rationale for the Proposed Adoption

The board of directors believes that it is in the best interests of our company and our shareholders to approve the adoption of the Restated Articles. As of May 5, 2011, there were 135,564,651 shares of common stock issued and outstanding, 39,872,930 shares of common stock reserved for issuance upon the exercise of outstanding options and warrants and 2,487,183 shares of common stock reserved for issuance upon the exercise of options available for grant pursuant to our 2002 Equity Incentive Plan. Further, if the shareholders approve Proposal 2, related to the adoption of the 2011 Equity Incentive Plan, an additional 13,000,000 shares will be reserved for issuance pursuant to such plan. Consequently, assuming the approval of Proposal 2, there are only approximately 9,075,236 shares of authorized common stock available for future issuance under our Third Restated and Amended Articles of Incorporation, as amended to date (the "Current Articles"), for other corporate purposes.

Adoption of the Restated Articles would increase the number of authorized shares of common stock by 100,000,000. Under the Restated Articles, the rights of the additional authorized shares of common stock would be identical to the rights of the shares of common stock currently outstanding, including the right to cast one vote per share and to participate in dividends when and to the extent declared and paid. Further, the authorization will not, in itself, have any effect on the rights of existing shareholders. If, however, the board of directors were to issue additional shares of common stock other than pursuant to a stock split or dividend, such issuance could have a dilutive effect on our earnings per share and the book or market value of our outstanding common stock. The issuance of additional shares of common stock could also dilute existing shareholders' voting power in our company.

If approved, the increased number of authorized shares of common stock will provide us with the ability to issue shares in connection with stock splits or dividends, financings, employee compensation plans, mergers, acquisitions and other strategic transactions and other general corporate purposes. The shares could be issued from time to time for such purposes as the board of directors may approve and, unless required by applicable law

or the rules of The NASDAQ Global Market or any stock exchange on which our common stock is listed, no additional shareholder approvals will be required. We have no current plans, proposals or arrangements for the issuance of any of the additional shares to be authorized under this Proposal 6.

The board of directors believes it is necessary and appropriate for us to maintain an adequate number of authorized shares of common stock for issuance with the approval of the board of directors. Without an adequate number of authorized shares of common stock, the board of directors will lack the flexibility to act promptly to meet future business and financing needs and opportunities as they arise. For example, we will need additional funds to conduct our planned research and development efforts. Historically, we have sought additional financing from the sale and issuance of equity securities. The ability of the board of directors to obtain commercially reasonable financing terms often depends on opportunistically accessing the capital markets. Without an adequate number of authorized shares of common stock, this flexibility would be lost and could have a material and adverse impact on our business and operations. Notwithstanding the foregoing, we have no current plans, proposals or arrangements for the issuance of any of the additional shares to be authorized under this Proposal 6.

In addition to the proposed increase in the number of authorized shares of common stock, the Restated Articles would update the name and address of our registered agent in Oregon and incorporate the terms of the Prior Amendments. The Prior Amendments are set forth in separate documents, making reference difficult. By incorporating the terms of the Prior Amendments, the Restated Articles would provide shareholders with one, consolidated governing document for our company.

Possible Anti-Takeover Effect

The authorization of additional shares of common stock could have an anti-takeover effect, although that is not the intention of this proposal. For example, without further shareholder approval, the board of directors could sell common stock in a private transaction to purchasers who would oppose a takeover, thereby potentially preventing a transaction favored by a majority of independent shareholders under which shareholders would have received a premium for their shares over then current market prices. Other existing provisions applicable to us that might have a material anti-takeover effect include (a) the Oregon Control Share Act, which under certain circumstances would operate to deprive a person or group that acquires more than 20% of the outstanding common stock of voting rights with respect to those shares; (b) the Oregon Business Combination statute, which places restrictions on business combination transactions with persons or groups that own 15% or more of the outstanding common stock, unless the transaction is approved by the board of directors; (c) executive employment agreements that provide for certain severance benefits if the relevant executive is terminated without cause or resigns for good reason upon or within a certain contractually defined time period of a change in control of our company; (d) staggered terms for members of our board of directors; (e) lack of cumulative voting for directors; and (f) provisions of outstanding employee options and other equity awards that accelerate vesting if there is a change in control of our company. The board of directors has no knowledge of any present efforts to accumulate shares of our common stock in the market or to gain control of us, and has no present intention to adopt any other provisions or enter into any other arrangements that would have a material anti-takeover effect.

Effect of the Proposed Adoption

If the proposal to adopt the Restated Articles is approved, the Restated Articles will be filed with the Secretary of State of the State of Oregon as soon as reasonably practicable following the adjournment of the annual meeting of shareholders. Upon filing, the Prior Amendments and updated registered agent information will be incorporated into the text of the Restated Articles and the authorized shares of common stock will be increased to 300,000,000.

If the proposal to adopt the Restated Articles is not approved, the Restated Articles will not be filed with the Secretary of State of the State of Oregon and our Current Articles will remain unchanged and in force.

Vote Required and Board of Directors Recommendation

Approval of the Restated Articles requires the affirmative vote of a majority of the shares of common stock outstanding and entitled to vote on the matter. As a result, abstentions, the failure to submit a proxy, or the failure to vote in person at the annual meeting of shareholders will have the same effect as votes against the proposal.

The board of directors recommends that shareholders vote "FOR" the adoption of the Restated Articles.

RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM (Proposal 7)

Our audit committee has selected the firm of KPMG LLP to conduct an audit in accordance with generally accepted auditing standards of our financial statements for the year ending December 31, 2011. A representative of that firm is expected to be present at the annual meeting to respond to appropriate questions and will be given an opportunity to make a statement if he or she so desires. The audit committee has discussed with KPMG LLP its independence from us and our management, and this discussion included consideration of the matters in the written disclosures required by the Public Company Accounting Oversight Board and the potential impact that non-audit services provided to us by KPMG LLP could have on its independence. This appointment is being submitted for ratification at the meeting. If not ratified, the audit committee will reconsider this appointment, although the audit committee will not be required to appoint different independent auditors. KPMG LLP has served as our independent auditors since 2002.

Fees Billed to Us by KPMG LLP during 2010 and 2009

Audit Fees

Fees and related expenses for the 2010 and 2009 audits by KPMG LLP of our annual financial statements, its review of the financial statements included in our quarterly reports and other services that are provided in connection with statutory and regulatory filings totaled \$330,000 and \$302,000, respectively. This represents a 9% annual increase in audit fees.

Audit-Related Fees

For the years 2010 and 2009, KPMG LLP billed us \$16,000 and \$94,800, respectively, for audit-related fees. The 2010 audit-related fees were related to an audit of our 401(k) plan. The 2009 audit-related fees were comprised of \$78,800 related to the issuance of comfort letters and \$16,000 related to an audit of our 401(k) plan.

Tax Fees

For the years 2010 and 2009, KPMG LLP did not bill us for any tax-related professional services.

All Other Fees

For the years 2010 and 2009, KPMG LLP did not bill us for any other professional services.

Policy on Audit Committee Pre-Approval of Fees

The audit committee must pre-approve all services to be performed for us by KPMG LLP. Pre-approval is granted usually at regularly scheduled meetings of the audit committee. If unanticipated items arise between regularly scheduled meetings of the audit committee, the audit committee has delegated authority to the chairman of the audit committee to pre-approve services, in which case the chairman communicates such pre-approval to the full audit committee at its next meeting. The audit committee also may approve the additional unanticipated services by either convening a special meeting or acting by unanimous written consent. During 2010 and 2009, all services billed by KPMG LLP were pre-approved by the audit committee in accordance with this policy.

Vote Required and Board of Directors Recommendation

The proposal will be approved if the votes cast in favor of this proposal exceed the votes cast against this proposal.

The audit committee has approved the appointment of KPMG LLP as our independent registered public accounting firm for the year ending December 31, 2011, and the board of directors recommends that shareholders vote "FOR" ratification of this appointment.

STOCK OWNED BY AVI BIOPHARMA, INC. MANAGEMENT AND PRINCIPAL SHAREHOLDERS

The following table sets forth certain information regarding the ownership of our common stock as of April 18, 2011, with respect to: (i) each person known by us to beneficially own more than 5% of the outstanding shares of our common stock, (ii) each of our directors, (iii) each of our named executive officers and (iv) all directors and executive officers as a group:

| | Amount and Nature of Beneficial | |
|---|---------------------------------------|------------------------|
| | Ownership | |
| Name and Address of Beneficial Owner(1) | (# of Shares)(2) | Percent of Class(2) |
| Officers and Directors | Shares)(2) | Class(2) |
| J. David Boyle II(3) | 546,950 | * |
| Anthony Chase(4) | 546,467 | * |
| Stephen Shrewsbury, M.D.(5) | 420,000 | * |
| Leslie Hudson, Ph.D. | 420,000 | * |
| Paul Medeiros(6) | 605,000 | * |
| Gil Price, M.D.(7) | 247,732 | * |
| M. Kathleen Behrens, Ph.D.(8) | 165,000 | * |
| Christopher Garabedian(9) | 145,000 | * |
| John Hodgman(10) | 133,334 | * |
| William Goolsbee (11) | 99,750 | * |
| Hans Wigzell, M.D., Ph.D.(12) | 95,000 | * |
| Graham Johnson, Ph.D. | — | * |
| Peter Linsley, Ph.D. | <u> </u> | * |
| Effie Toshav | <u> </u> | * |
| All directors and officers as a group (13 persons)(13) | 3,004,233 | 2.2% |
| 5% Shareholders | -,, | |
| George W. Haywood(14) | 7,846,499 | 5.8% |
| c/o Moomjian, Waite & Coleman, LLP | 7,840,499 | 5.670 |
| 100 Jericho Quadrangle, Suite 225 | | |
| Jericho, New York 11753 | | |
| , | | |
| Rockall Emerging Markets Master Fund Limited(15) | 8,423,530 | 6.2% |
| c/o M&C Corporate Services Limited | | |
| P.O. Box 309GT | | |
| Ugland House, South Church Street, George Town, Grand Cayman, | | |
| Cayman Islands | | |
| BlackRock, Inc.(16) | 6,945,871 | 5.1% |
| 40 East 52nd Street | | |
| New York, NY 10022 | | |
| | | |

- * Less than one percent.
- (1) Except as otherwise indicated, the address of each shareholder identified is c/o AVI BioPharma, Inc., 3450 Monte Villa Parkway, Suite 101, Bothell, Washington 98021. Except as indicated in the other footnotes to this table, each person named in this table has sole voting and investment power with respect to all shares of stock beneficially owned by that person.
- (2) Beneficial ownership is determined in accordance with rules of the SEC and generally includes voting or investment power with respect to securities. Shares of common stock subject to options and warrants currently exercisable or convertible, or exercisable or convertible within sixty (60) days of April 18, 2011, are deemed beneficially owned and outstanding for computing the percentage of the person holding such securities, but are not considered outstanding for computing the percentage of any other person. Based on 135,564,651 shares of common stock issued and outstanding as of April 18, 2011.

- (3) Includes 476,668 shares subject to options exercisable within sixty (60) days of April 18, 2011.
- (4) Includes 15,000 shares subject to options exercisable within sixty (60) days of April 18, 2011 and 140,000 shares subject to currently exercisable warrants.
- (5) Includes 360,000 shares subject to options exercisable within sixty (60) days of April 18, 2011.
- (6) Includes 605,000 shares subject to options exercisable within sixty (60) days of April 18, 2011. Pursuant to the terms of a separation and release agreement that we expect to enter into with Mr. Medeiros in connection with the termination of his employment, all unvested options will immediately vest and be exercisable for a period of 180 days following June 1, 2011, the effective date of termination.
- (7) Includes 84,750 shares subject to options exercisable within sixty (60) days of April 18, 2011.
- (8) Includes 60,000 shares subject to options exercisable within sixty (60) days of April 18, 2011.
- (9) Includes 15,000 shares subject to options exercisable within sixty (60) days of April 18, 2011.
- (10) Includes 123,334 shares subject to options exercisable within sixty (60) days of April 18, 2011.
- (11) Includes 84,750 shares subject to options exercisable within sixty (60) days of April 18, 2011.
- (12) Includes 95,000 shares subject to options exercisable within sixty (60) days of April 18, 2011.
- (13) Includes 1,919,502 shares subject to options exercisable within sixty (60) days of April 18, 2011 and 140,000 shares subject to currently exercisable warrants.
- (14) Based solely on information contained in a Schedule 13G/A filed on February 14, 2011 by George W. Haywood, which reported (i) sole voting and dispositive power as to 7,146,499 shares, which amount includes 2,180,673 shares subject to currently exercisable warrants and 153,060 shares owned by Mr. Haywood's minor children, and (ii) shared voting and dispositive power as to 700,000 shares held by Mr. Haywood's spouse.
- Based solely on information contained in a Schedule 13G/A filed on February 14, 2011 by Rockall Emerging Markets Master Fund Limited (the "Fund"), Meldrum Asset Management, LLC (the "Investment Manager"), Con Egan ("Egan"), Conor O'Driscoll ("O'Driscoll") and Fulvio Dobrich ("Dobrich" and together with Egan and O'Driscoll, the "Managers"), who are collectively referred to as the "Reporting Persons." The Managers are the principals of the Investment Manager, which is the investment manager of the Fund. In the aggregate, the Reporting Persons beneficially owned 8,423,530 shares. The beneficial ownership of each Reporting Person was as follows: (i) the Fund beneficially owned 5,589,175 shares, which amount includes 631,034 shares subject to currently exercisable warrants, (ii) the Investment Manager, as the manager of the Fund, beneficially owned 5,589,175 shares, which amount includes 631,034 shares subject to currently exercisable warrants, (iii) Egan, both as a Manager and in his individual capacity, beneficially owned 6,739,175 shares, (iv) O'Driscoll, both as a Manager and in his individual capacity, beneficially owned 6,114,066 shares, and (v) Dobrich, both as a Manager and in his individual capacity, beneficially owned 6,748,639 shares, which amount includes 105,264 shares subject to currently exercisable warrants. Each of the Fund and the Investment Manager, as the manager of the Fund, has the power to vote and dispose of the shares beneficially owned by the Fund. Each of the Managers, by virtue of his position as a principal of the Investment Manager, has the shared authority to vote and dispose of all of the shares held by the Fund, as well as the sole power to vote and dispose of shares held in his individual capacity.
- (16) Based solely on information contained in a Schedule 13G filed on February 2, 2011 by BlackRock, Inc.

Equity Compensation Plan Information

The following table summarizes information, as of December 31, 2010, with respect to shares of our common stock that may be issued under our existing equity compensation plans:

| | | | Number of |
|--|------------------|------------------|---------------|
| | | | securities |
| | | | remaining |
| | | | available for |
| | | | future |
| | Number of | | issuance |
| | securities to be | Weighted- | under equity |
| | issued upon | average exercise | compensation |
| | exercise of | price of | plans |
| | outstanding | outstanding | (excluding |
| | options, | options, | securities |
| | warrants and | warrants and | reflected in |
| Plan category | rights(a) | rights(b) | column(a))(c) |
| Equity compensation plans approved by security holders(1) | 8,490,055 | \$ 2.14 | 1,771,426 |
| Equity compensation plans not approved by security holders | - | _ | _ |
| Total | 8,490,055 | N/A | 1,771,426 |

⁽¹⁾ The number of securities remaining available for future issuance under equity compensation plans includes shares from our 2002 Equity Incentive Plan (the "2002 Plan"). The number of shares reserved for issuance is increased by an automatic annual share increase pursuant to which the number of shares available for issuance under the 2002 Plan automatically increases on the first trading day of each year (the "First Trading Day"), beginning with 2003 and continuing through 2011, by an amount equal to 2% of the total number of shares outstanding on the last trading day of the immediately preceding year, subject to certain limitations set forth in the 2002 Plan. On January 3, 2011, pursuant to the terms of the 2002 Plan, 2,247,049 additional shares of common stock were added to the 2002 Plan and became available for future grant.

AUDIT COMMITTEE REPORT

The audit committee oversees the financial reporting process of our company on behalf of our board of directors. Management has the primary responsibility for the financial statements and the reporting process, including the systems of internal controls. In fulfilling its oversight responsibilities, the audit committee reviewed the audited financial statements in our Annual Report on Form 10-K for the year ended December 31, 2010 with management, including a discussion of the accounting principles, the reasonableness of significant judgments, and the clarity of disclosures in the financial statements.

The audit committee reviewed with KPMG LLP, our independent registered public accounting firm that is responsible for expressing an opinion on the conformity of those audited financial statements with generally accepted accounting principles and an opinion on our internal controls over financial reporting, its judgments about our accounting principles and the other matters required to be discussed with the audit committee under generally accepted auditing standards, including Statement on Auditing Standards No. 61, Communications with Audit Committees, as amended. The audit committee has received from KPMG LLP the written disclosure and the letter required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the audit committee concerning independence, and the audit committee has discussed with KPMG LLP their independence. The audit committee has considered the effect of non-audit fees on the independence of KPMG LLP and has concluded that such non-audit services are compatible with the independence of KPMG LLP.

The audit committee discussed with KPMG LLP the overall scope and plans for its audits. The audit committee meets with the independent registered public accounting firm, with and without management present, to discuss the results of its audits and quarterly reviews, its observations regarding our internal controls, and the overall quality of our financial reporting. The audit committee held a total of five meetings during 2010.

In reliance on the reviews and discussions referred to above, the audit committee recommended to the board of directors, and the board of directors has approved, that the 2010 audited financial statements be included in the Annual Report on Form 10-K for the year ended December 31, 2010 for filing with the Securities and Exchange Commission.

This report has been furnished by the members of the audit committee

AUDIT COMMITTEE

John Hodgman, Chairman William Goolsbee Anthony Chase Gil Price, M.D.

CORPORATE GOVERNANCE AND BOARD MATTERS

Board's Role in Risk Oversight

The board of directors and each of its standing committees (audit, compensation, and nominating and corporate governance) oversee the management of risks inherent in the operation of our business. The board of directors has delegated certain risk management responsibilities to the board committees. The board of directors and the audit committee evaluate our policies with respect to risk assessment and risk management, and monitor our liquidity risk, regulatory risk, operational risk and enterprise risk by regular reviews with management and external auditors and other advisors. In its periodic meetings with the independent accountants, the audit committee discusses the scope and plan for the audit and includes management in its review of accounting and financial controls, assessment of business risks and legal and ethical compliance programs. The board of directors and the nominating and corporate governance committee monitor our governance and succession risk by regular review with management and outside advisors. As part of its responsibilities as set forth in its charter, the compensation committee reviews the impact of our executive compensation program and the associated incentives to determine whether they present a significant risk to us. The compensation committee has concluded, based on its reviews and analysis of our compensation policies and procedures, that such policies and procedures are not reasonably likely to have a material adverse effect on us.

Board Leadership Structure

The positions of Chief Executive Officer and Non-Executive Chairman of the Board are held by two different individuals (Mr. Garabedian and Mr. Goolsbee, respectively). Our Non-Executive Chairman has many of the duties and responsibilities that a "lead independent director" might have and, therefore, the board of directors has determined not to designate a separate "lead independent director." This current structure allows our Chief Executive Officer to focus on our strategic direction and our day-to-day business while our Non-Executive Chairman provides guidance to the Chief Executive Officer and leads the board in its fundamental role of providing advice to, and independent oversight of, management. The board of directors recognizes the time, effort and energy that the Chief Executive Officer is required to devote to his position given our stage of development, as well as the commitment required to serve as our Non-Executive Chairman. The board of directors believes that this leadership structure is appropriate because it allows us to speak externally to our various constituents, as well as internally to our officers and employees, on a unified and consistent basis, and fosters clear accountability and effective decision-making. At the same time, our board structure incorporates appropriate board independence and programs for risk management oversight of our overall operations, including our compensation programs. The board of directors will continue to assess the appropriateness of this structure as part of the board of directors' broader succession planning process.

We have been, and continue to be, a strong advocate of the independence of the board of directors and have put into place measures to see that our directors provide independent oversight. The board of directors believes that it also has established substantial independent oversight of management. For example, five of seven of our current directors are independent under the NASDAQ guidelines. In addition, each of the board of directors' three standing committees is currently comprised solely of independent directors. Each of the standing committees operates under a written charter adopted by the board of directors. Also, our non-management directors meet in executive session periodically without management in attendance. One result of this focus on director independence is that oversight of critical matters, such as the integrity of our financial statements, employee compensation, including compensation of the executive officers, the selection of directors and the evaluation of the board of directors and its committees is entrusted to independent directors.

Board of Directors and Committee Meetings

During 2010, our board of directors met 21 times and acted by unanimous written consent twice. During 2010, our audit committee met five times, our compensation committee met eight times, and our nominating and

corporate governance committee met four times. All of our directors attended more than 75% of the aggregate of all meetings of the board of directors and of the committees on which such director served. Although we do not have a formal policy regarding attendance by members of the board of directors at our annual meeting of shareholders, our directors are encouraged to attend and six of our current directors attended the 2010 annual meeting of shareholders.

Determination Regarding Director Independence

The board of directors has determined that each of our current directors, except Dr. Wigzell and Mr. Garabedian, is an "independent director" as that term is defined in NASDAQ Marketplace Rule 5605(a)(2). Messrs. Casey and Forrest and Drs. Hudson and Henney served on the board of directors for part of 2010 and the board determined that each of Dr. Henney and Messrs. Casey and Forrest was an "independent director" and Dr. Hudson was not an "independent director" as that term is defined in NASDAQ Marketplace Rule 5605(a)(2). Although Mr. Forrest acted as our Interim Chief Executive Officer until February 8, 2008, under applicable NASDAQ rules he may be considered independent if the board of directors concludes that such former employment and any compensation received would not interfere with his exercise of independent judgment in carrying out his responsibilities as director. The board of directors concluded that Mr. Forrest was independent in accordance with the applicable NASDAQ rules. The non-employee members of the board generally meet in executive session at least quarterly.

The board of directors has also determined that each current member of the audit committee, the compensation committee, and the nominating and corporate governance committee meets the independence standards applicable to those committees prescribed by the NASDAQ, the SEC, and the Internal Revenue Service.

Finally, the board of directors has determined that Mr. Hodgman, the chairman of the audit committee, is an "audit committee financial expert" as that term is defined in Item 407(d)(5) of Regulation S-K promulgated by the SEC.

Code of Conduct

We have adopted a Code of Business Conduct and Ethics (the "Code of Conduct"). The Code of Conduct applies to all directors and employees, including all officers, managers and supervisors, and is intended to better ensure full, fair, accurate, timely and understandable disclosures in our public documents and reports, compliance with applicable laws, prompt internal reporting of violations of these standards and accountability for adherence to standards. We have contracted with Ethicspoint to provide a method for employees and others to report violations of the Code of Conduct anonymously. A copy of the Code of Conduct is posted on our website at www.avibio.com.

Committees of the Board of Directors

During 2010, our board of directors had three standing committees: the audit committee; the compensation committee (which has had certain of its responsibilities delegated to the new employee option committee by the board as set forth in the "Executive Compensation — Compensation Discussion and Analysis — Equity Incentive Plan Compensation" section later in this proxy statement); and the nominating and corporate governance committee. All of the committee charters, as adopted by our board of directors, are available on our website at www.avibio.com under "Investor Relations — Corporate Governance." The functions performed by each committee and the members of each committee are described below.

Audit Committee

The audit committee reviews with our independent registered public accounting firm the scope, results, and costs of the annual audit and our accounting policies and financial reporting. Our audit committee (i) has direct responsibility for the appointment, compensation, retention, and oversight of our independent registered public accounting firm, (ii) discusses with our auditors their independence from management, (iii) reviews the scope of the independent annual audit, (iv) establishes procedures for handling complaints regarding our accounting practices, (v) oversees the annual and quarterly financial reporting process, (vi) has authority to engage any independent advisors it deems necessary to carry out its duties, and (iv) has appropriate funding to engage any necessary outside advisors. A full description of the responsibilities and duties of the audit committee is contained in the audit committee charter. The current members of the audit committee are John Hodgman (Chairman), Anthony Chase, William Goolsbee and Gil Price. M. Kathleen Behrens was a member of the audit committee until June 2010 and Christopher Garabedian was a member of the audit committee until December 2010, when he stepped down from the audit committee in connection with his appointment as President and Chief Executive Officer. The board of directors has determined that Mr. Hodgman, the chairman of the audit committee, is an "audit committee financial expert" as that term is defined in Item 407(d)(5) of Regulation S-K promulgated by the SEC. The audit committee report is set forth above. The audit committee charter requires the committee to review and assess the charter's adequacy annually.

Compensation Committee

The compensation committee oversees our compensation and benefits practices and programs, as more fully described in the "Executive Compensation — Compensation Discussion and Analysis" section later in this proxy statement. The current members of the compensation committee are William Goolsbee (Chairman), M. Kathleen Behrens and John Hodgman. Michael Casey and K. Michael Forrest were members of the compensation committee until June 2010 and April 2010, respectively. Christopher Garabedian was the chairman and a member of the compensation committee until December 2010, when he stepped down from the compensation committee in connection with his appointment as President and Chief Executive Officer. The Compensation Committee Report is set forth in the "Executive Compensation — Compensation Committee Report" section later in this proxy statement.

Nominating and Corporate Governance Committee

The nominating and corporate governance committee reviews candidates and makes recommendations of nominees for the board of directors. The nominating and corporate governance committee also is responsible for considering and making recommendations to the board of directors concerning the appropriate size, functions and needs of the board of directions and to ensure compliance with the Code of Conduct. As part of its duties, the nominating and corporate governance committee will consider individuals who are properly proposed by shareholders to serve on the board of directors in accordance with laws and regulations established by the SEC and The NASDAQ Global Market, our bylaws and applicable corporation law, and make recommendations to the board of directors regarding such individuals based on the established criteria for members of our board. The nominating and corporate governance committee may consider in the future whether our company should adopt a more formal policy regarding shareholder nominations. The current members of the nominating and corporate governance committee are Gil Price (Chairman), M. Kathleen Behrens and Anthony Chase. Michael Casey and William Goolsbee were members of the nominating and corporate governance committee until June 2010.

The board of directors believes that the board, as a whole, should possess a combination of skills, professional experience, and diversity of backgrounds necessary to oversee our business. In addition, the board of directors believes that there are certain attributes that every director should possess, as reflected in the board's membership criteria. Accordingly, the board and the nominating and corporate governance committee consider the qualifications of directors and director candidates individually and in the broader context of the board's overall composition and our current and future needs. The nominating and corporate governance committee has

not established specific minimum age, education, years of business experience or specific types of skills for potential candidates, but, in general, expects qualified candidates will have ample experience and a proven record of business success and leadership. In general, each director will have the highest personal and professional ethics, integrity and values and will consistently exercise sound and objective business judgment. It is expected that the board of directors as a whole will have individuals with significant appropriate senior management and leadership experience, a long-term and strategic perspective, the ability to advance constructive debate, and a global perspective. These qualifications and attributes are not the only factors the nominating and corporate governance committee will consider in evaluating a candidate for nomination to the board of directors, and the nominating and corporate governance committee may reevaluate these qualifications and attributes at any time.

The nominating and corporate governance committee is responsible for developing and recommending board membership criteria to the board for approval. The criteria include the candidate's business experience, qualifications, attributes and skills relevant to the management and oversight of our business, independence, judgment and integrity, the ability to commit sufficient time and attention to board activities, and any potential conflicts with our business and interests. In addition, the board and the nominating and corporate governance committee annually evaluate the composition of the board to assess the skills and experience that are currently represented on the board, as well as the skills and experience that the board will find valuable in the future, given our current situation and strategic plans. While not maintaining a specific policy on board diversity requirements, the board and the nominating and corporate governance committee believe that diversity is an important factor in determining the composition of the board and, therefore, seek a variety of occupational and personal backgrounds on the board in order to obtain a range of viewpoints and perspectives and to enhance the diversity of the board. This annual evaluation of the board's composition enables the board and the nominating and corporate governance committee to update the skills and experience they seek in the board as a whole, and in individual directors, as our needs evolve and change over time and to assess the effectiveness of efforts at pursuing diversity. In identifying director candidates from time to time, the board and the nominating and corporate governance committee may identify specific skills and experience that they believe we should seek in order to constitute a balanced and effective board.

Except as set forth above, the nominating and corporate governance committee does not have a formal process for identifying and evaluating nominees for director. The nominating and corporate governance committee does not currently engage any third party director search firms but may do so in the future if it deems appropriate and in our best interests. These issues will be considered by the nominating and corporate governance committee in due course, and, if appropriate, the nominating and corporate governance committee will make a recommendation to the board of directors addressing the nomination process.

Communications with the Board of Directors

The board of directors welcomes and encourages shareholders to share their thoughts regarding our company. While the board of directors encourages such communication, for a variety of reasons, including compliance with securities laws, fiduciary duties of the directors, and good business practices relating to corporate communications, our preference is that shareholders communicate with the board of directors in compliance with our communications policy. Our communications policy, as adopted by the board of directors, provides that all communications should be in writing and directed to the attention of our Investor Relations Department at AVI BioPharma, Inc., 3450 Monte Villa Parkway, Suite 101, Bothell, Washington, 98021. Our Investor Relations Department will review the communication, and if the communication is determined to be relevant to our operations, policies, or procedures (and not vulgar, threatening, or of an inappropriate nature not relating to our business), Investor Relations will then distribute a copy of the communication to the chairman of the board, the chairman of the audit committee and our internal and outside counsel. Based on the input and decision of these persons, along with the entire board of directors if it is deemed necessary, we, through our Investor Relations Department, will respond to the communication.

Compensation of Directors

We use a combination of cash and stock-based incentive compensation to attract and retain qualified candidates to serve on the board of directors. In setting director compensation, we consider the significant amount of time that directors expend in fulfilling their duties to us as well as the skill-level we require of our directors. Board members receive cash compensation in U.S. dollars. We also reimburse our directors for travel and other necessary business expenses incurred in the performance of their services for us.

Cash Compensation

On September 27, 2010, our board of directors, upon the recommendation of the compensation committee, approved and adopted a Non-Employee Director Compensation Policy (the "Director Compensation Policy"). Under the Director Compensation Policy, our non-employee directors receive cash compensation of \$35,000 per year for their service on the board of directors. In addition, any non-employee director serving as chairperson of the board receives an additional \$45,000 per year for service as chairperson. The chairpersons of the audit, compensation and nominating and corporate governance committees receive additional fees of \$16,000, \$12,000 and \$5,000 per year, respectively, for such service. Finally, members of the audit, compensation and nominating and corporate governance committees that are not serving as the chairperson of such committees receive additional fees of \$8,000, \$6,000 and \$3,000 per year, respectively, for such service. All cash fees are paid on a quarterly basis at the beginning of the applicable quarter.

In 2010, prior to the adoption of the Director Compensation Policy, our non-employee directors, excluding the chairperson of the board, received cash compensation of \$30,000 per year for their service on the board of directors. The non-employee chairperson of the board received cash compensation of \$75,000 per year for their service as chairperson. The chairpersons of the audit, compensation and nominating and corporate governance committees received additional fees of \$12,000, \$5,000 and \$5,000 per year, respectively, for such service. Finally, members of the audit, compensation and nominating and corporate governance committees that were not serving as the chairperson of such committees received additional fees of \$8,000, \$3,000 and \$3,000 per year, respectively, for such service. All cash fees were paid on a quarterly basis at the beginning of the applicable quarter.

Stock-Based Compensation

Pursuant to the Director Compensation Policy, each individual who is first elected or appointed as a non-employee member of the board of directors is automatically granted an option to purchase 60,000 shares of our common stock, with 25% of the total amount of shares underlying the option vesting each year on the earlier of (i) the anniversary date of the grant and (ii) the date of the annual meeting of our shareholders in the year following the date of grant. In addition, each non-employee director who has served on the board of directors for at least six months will be automatically granted an option to purchase 30,000 shares of our common stock on the date of the first meeting of the board of directors held after the annual meeting of our shareholders. All of the shares underlying such option will vest on the earlier of (i) the anniversary date of the grant and (ii) the date of the annual meeting of our shareholders in the year following the date of grant, provided that the non-employee director continues to serve as a director through such date. Also, each non-employee director who has served on the board of directors for at least six months prior to the first meeting of the board of directors held after the annual meeting of our shareholders will be automatically granted a restricted stock award for 5,000 shares of our common stock on the date of the first meeting of the board of directors held after the annual meeting of our shareholders. All of the shares underlying the restricted stock award will vest on the earlier of (i) the anniversary date of the grant and (ii) the date of the annual meeting of our shareholders in the year following the date of grant, provided that the non-employee director continues to serve as a director through such date. The stock-based compensation component for non-employee directors prior to the adoption of the Director Compensation Policy was the same as that set forth in the Director Compensation Policy.

The following table sets forth compensation information for our non-employee directors for 2010. The table excludes Dr. Leslie Hudson who did not receive any compensation from us in his role as director in 2010. All compensation numbers are expressed in U.S. dollars.

Director Compensation for 2010

| | Earned or Paid n Cash (\$) (b) | Stock | Awards (\$) | Option Awards (\$) (1) (d) | All Other pensation (\$) | Total (\$) (h) |
|-------------------------------------|------------------------------------|-------|-------------|-----------------------------|-----------------------------|----------------|
| William Goolsbee | \$ 57.750 | \$ | 6.500 | \$ 26,529 | (g) — | \$ 90,779 |
| Anthony Chase(2) | 30,000 | | _ | 50,610 | _ | 80,610 |
| John Hodgman | 46,500 | | 6,500 | 26,529 | _ | 79,529 |
| Christopher Garabedian(3) | 24,500 | | _ | 53,058 | _ | 77,558 |
| Gil Price, M.D. | 41,750 | | 6,500 | 26,529 | _ | 74,779 |
| M. Kathleen Behrens, Ph.D. | 39,000 | | 6,500 | 26,529 | _ | 72,029 |
| Hans Wigzell, M.D., Ph.D.(3)(4) | 16,250 | | _ | 53,058 | \$ 61,224 | 130,532 |
| Former Directors | | | | | | |
| Michael Casey(5) | 41,500 | | _ | _ | _ | 41,500 |
| K. Michael Forrest(6) | 16,500 | | _ | _ | _ | 16,500 |
| Christopher Henney, Ph.D., D.Sc.(5) | 16,500 | | _ | _ | _ | 16,500 |

- (1) The amounts in the option awards column reflect the aggregate grant date fair value of option awards granted in 2010 calculated in accordance with FASB ASC Topic 718. Assumptions used in the calculation of this amount are included in Note 3 to the financial statements set forth in our Annual Report on Form 10-K for 2010, filed with the SEC on March 15, 2011. As of December 31, 2010, each director and former director had the following number of options and shares of restricted stock outstanding, respectively: Mr. Goolsbee: 103,000 and 5,000; Mr. Chase: 60,000 and 0; Mr. Hodgman: 133,334 and 5,000; Mr. Garabedian: 60,000 and 0; Dr. Price: 103,000 and 5,000; Dr. Behrens 90,000 and 5,000; Dr. Wigzell: 140,000 and 0; Mr. Casey: 68,000 and 0; Mr. Forrest: 378,000 and 0; and Dr. Henney 15,000 and 0.
- (2) Mr. Chase was appointed to the board of directors in April 2010. For 2010, Mr. Chase did not receive the annual grants for non-employee directors of 5,000 shares of restricted stock and an option to purchase 30,000 shares. In connection with his appointment to the board, Mr. Chase was granted an option to purchase 60,000 shares.
- (3) Mr. Garabedian and Dr. Wigzell were elected to the board of directors in June 2010. For 2010, neither Mr. Garabedian nor Dr. Wigzell received the annual grants for non-employee directors of 5,000 shares of restricted stock and an option to purchase 30,000 shares. In connection with their election, each of Mr. Garabedian and Dr. Wigzell was granted an option to purchase 60,000 shares. In connection with his appointment as our President and Chief Executive Officer, Mr. Garabedian will no longer receive compensation for service on the board of directors.
- (4) The amounts set forth in the column entitled "All Other Compensation" were earned by Dr. Wigzell prior to his election to our board of directors pursuant to the terms of a consulting agreement with us, which has terminated. The aggregate amount includes cash fees of \$25,000 and an option to purchase 40,000 shares of common stock with a grant date fair value of \$36,224 (calculated in accordance with FASB ASC Topic 718).
- (5) Mr. Casey and Dr. Henney did not stand for reelection to the board of directors at our 2010 annual meeting of shareholders.
- (6) Mr. Forrest resigned from the board of directors in April 2010.

COMPENSATION POLICIES, PRACTICES, RISKS AND RELATED ISSUES

Overview

We are a biopharmaceutical company developing products in the growing field of RNA therapeutics. Current applications of our technology platform include clinical trials for genetic diseases (Duchenne muscular dystrophy) and infectious diseases (Ebola and Marburg viruses), and earlier programs in H1N1 influenza and other early discovery targets. We operate in a highly complex business environment and believe that a competitive compensation program is an important tool to help attract, retain, recognize and reward the talented employees we need to achieve our mission and deliver value to our shareholders.

The objective of our compensation policies and programs is to attract and retain well-qualified senior executive management, to motivate their performance toward clearly defined goals, and to align their long term interests with those of our shareholders. In addition, our compensation committee believes that maintaining and improving the quality and skills of our management and appropriately incentivizing their performance are critical factors affecting our shareholders' realization of long-term value. We intend that total compensation and each of its components, including base salary, incentive cash compensation, equity compensation, benefits and perquisites be competitive in the biopharmaceutical marketplace for suitable talent and in accord with our short and long term goals. While base compensation, benefits and perquisites are primarily a factor of being competitive in the biopharmaceutical marketplace for employees, incentive compensation is primarily merit based, with actual compensation for named executive officers other than the Chief Executive Officer a function of the achievement of defined and agreed corporate and individual goals. With respect to our Chief Executive Officer, 100% of the goals are tied to corporate objectives to reflect the fact that our Chief Executive Officer makes strategic decisions that influence us as a whole and thus, it is more appropriate to reward performance against corporate objectives.

Risk Assessment and Compensation Practices

We believe that any risks arising from our compensation policies and programs are not reasonably likely to have a material adverse effect on us in the future.

The compensation committee reviewed our compensation policies and programs and determined the following:

- we structure our total compensation to consist of both fixed (salary and benefits) and variable compensation (cash incentive, equity compensation and merit based annual adjustments). We believe that the variable compensation elements provide an appropriate percentage of overall compensation to motivate executives to focus on our performance, while the fixed element serves to provide an appropriate and fair compensation level that allows us to remain competitive in the biopharmaceutical market to obtain and retain the services of our employees while also not encouraging executives and non-executive employees to take unnecessary or excessive risks in the achievement of goals;
- we believe that our compensation program balances short and long-term performance and does not place inappropriate focus on achieving short-term results at the risk of long-term, sustained performance;
- · all incentive plan designs and specific elements are reviewed and approved by the compensation committee annually;
- performance targets for the annual performance plan, which covers all named executives and most employees, are established annually by our compensation committee and the board. We have internal controls over the measurement and calculation of these performance metrics, designed to prevent manipulation of results by any employee, including our executives. Additionally, the compensation committee and the board monitor the corporate performance metrics formally no less than annually and periodically on a more informal basis during the year;

- the compensation committee has the discretion to increase or decrease any plan payment upwards or downwards, allowing the compensation committee to consider the circumstances surrounding corporate and/or individual performance and adjust payments accordingly;
- there are appropriate internal controls over the processing of payments;
- our existing governance and organizational structure incorporates a substantial risk management component through the review and actions of the board and its standing committees; and
- the long-term component of compensation consists of restricted stock grants and stock option grants. Our primary long-term incentive grants are stock options, which would only have value if our stock price increases subsequent to the date of grant. Vesting requirements of three to four years encourage employees to take a long-term perspective on overall corporate performance, which ultimately influences share price appreciation. We believe that long-term equity compensation balances the cash incentives in place to motivate short-term performance.

EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Introduction

Throughout this section of the Proxy Statement, the individuals who served as our Chief Executive Officer and Chief Financial Officer during 2010, as well as the other individuals included in the Summary Compensation Table in this Proxy Statement, are referred to as the "named executive officers."

Compensation Philosophy and Objectives

The objective of our compensation policies and programs is to attract and retain senior executive management, to motivate their performance toward clearly defined goals, and to align their long term interests with those of our shareholders. We seek, and have sought, to reward and to provide incentives to named executive officers for their performance and delivery against agreed goals. Over the past few years, we have seen significantly increased demand for executives with industry-specific skills and experience and a highly competitive market for such executives. Additionally, given the competitive nature of our industry, the small size of our company relative to certain other members of our industry and the fact that there was a doubt about our ability to secure the funding needed to continue our research and development programs in 2010 at the time certain changes in management were made, we faced significant challenges in recruiting senior members of our management team. Thus, in 2010 the attraction and retention of executives was one of the key purposes of our executive compensation program and we expect that it will continue to be so in 2011 and beyond.

Our executive compensation program also includes a significant pay-for-performance component. In that respect, the compensation program is designed to reward the named executive officers for meeting specific goals that are established and reviewed by the compensation committee for each named executive officer and for our company as a whole. In 2010, the compensation committee, the board and our then-current Chief Executive Officer agreed and set performance goals for each named executive officer and our company as a whole. Following the completion of 2010, the compensation committee, with input from both Mr. Boyle and Mr. Garabedian, assessed the degree to which the corporate goals were met and how each named executive officer had performed with respect to these goals. The compensation committee made an independent assessment with respect to Mr. Boyle's performance as Interim President and Chief Executive Officer. The 2011 performance goals for our named executive officers are substantially similar to those for 2010 and relate to various corporate objectives, including objectives related to the development of our product candidates, our financial condition and certain internal and external business development activities.

The at-risk component of the compensation package for each named executive officer, which includes a targeted cash bonus and long-term equity incentives, is determined in large part on the basis of how that named executive officer performed in meeting his or her goals. Compensation decisions are also based on market factors that require us to remain competitive in our compensation package in order to attract and retain qualified individuals.

In addition to the foregoing, the following executive compensation principles guided the compensation committee during 2010 in fulfilling its roles and responsibilities:

- compensation levels and opportunities should be sufficiently competitive to facilitate recruitment and retention of experienced executives in our highly competitive talent market;
- compensation should reinforce our business strategy by integrating and communicating key metrics and operational performance objectives and by emphasizing incentives in the total compensation mix;
- compensation programs should align executives' long-term financial interests with those of the shareholders by providing equity-based incentives without incentivizing the executives to take inappropriate risks in order to enhance their individual compensation;

- compensation programs should be flexible, giving the compensation committee and our board of directors discretion to make adjustments on an
 as-needed basis;
- similarly situated executives should be compensated similarly; and
- compensation should be transparent and easily understandable to both our executives and our shareholders.

Significant Management Changes in 2010

In 2010, we underwent several senior management changes, including the resignation of Dr. Hudson as our President and Chief Executive Officer and the appointment of our Senior Vice President and Chief Financial Officer David Boyle as Interim President and Chief Executive Officer. In addition, in December 2010 we hired Christopher Garabedian, a member of our board, as President and Chief Executive Officer, effective January 1, 2011.

The Compensation Committee

Our executive compensation program is administered by our compensation committee. As of December 31, 2010, the compensation committee was composed of three directors: M. Kathleen Behrens, Ph.D., John Hodgman and William Goolsbee (Chairman). Also, K. Michael Forrest, Michael Casey and Christopher Garabedian were members of the compensation committee during a portion of 2010.

The compensation committee is responsible for reviewing, assessing, and approving all elements of compensation for our named executive officers. More specifically, the compensation committee is directly responsible for establishing annual Company-wide performance goals and objectives for our named executive officers and for working with our Chief Executive Officer to establish individual performance goals for each of the other named executive officers. This responsibility includes, among other things: (i) evaluating the performance of our Chief Executive Officer and other executives as determined by the compensation committee in light of the approved performance goals and objectives; (ii) setting the compensation of the Chief Executive Officer and other executives based upon the evaluation of the performance of the Chief Executive Officer and the other executives; (iii) making recommendations to the board of directors with respect to new cash-based incentive compensation plans and equity-based compensation plans; and (iv) preparing an annual self-evaluation report of the compensation committee.

The compensation committee has independent authority to make compensation decisions for our named executive officers. Certain duties related to the grant of options to non-executive employees that are otherwise within the scope of the compensation committee's authority have been delegated by the board of directors to the new employee option committee as set forth in the "— Equity Incentive Plan Compensation" section later in this proxy statement.

Role of Executive Officers in Compensation Decisions

Our Chief Executive Officer plays a pivotal role in determining executive compensation. No less than annually, our Chief Executive Officer assesses the performance of the named executive officers. He then recommends to the compensation committee a base salary, performance-based cash bonus, and a grant of stock options for each named executive officer based on that assessment. The compensation committee considers the information provided by the Chief Executive Officer, together with other information available to the compensation committee and determines the compensation for each named executive officer other than the Chief Executive Officer. With respect to determining the compensation of our Chief Executive Officer, the compensation committee meets without the Chief Executive Officer.

Use of Compensation Consultants and Reports

In establishing compensation for 2010, the compensation committee retained the compensation consultant Frederic W. Cook & Co., Inc. ("FW Cook") to review our executive and director compensation programs. In November 2009 FW Cook presented its assessment and recommendations to the compensation committee. The FW Cook report considered information including, but not limited to, public filings and the Radford Global Life Sciences Survey. Based in part on such assessment and recommendations, the compensation committee approved increases in the base salaries of our named executive officers in 2010 and recommended changes to the compensation of our non-employee directors, which changes were implemented in September 2010.

In connection with the search for a new permanent Chief Executive Officer, a special committee of the compensation committee retained the compensation consultant Compensia, Inc. to provide assistance in determining the terms and conditions of Mr. Garabedian's offer of employment as President and Chief Executive Officer. For 2011, the compensation committee engaged Compensia to conduct a thorough review of our executive compensation practices.

Peer Group Companies for 2010

In analyzing our executive compensation program for 2010, the compensation committee compared certain aspects of compensation, including base salary, target bonus and long-term equity incentives, to those provided by our peer group. This peer group included biotechnology companies with which we compete for executive talent. For 2010 our peer group consisted of:

- Acadia Pharmaceuticals;
- Agenus (formerly Antigenics);
- ARIAD Pharmaceuticals;
- Array BioPharma;
- · Chelsea Therapeutics;
- Idenix Pharmaceuticals;
- Idera Pharmaceuticals;
- Inovio Pharmaceuticals;
- Metabolix;
- NeurogesX;
- · Oncogenex Pharmaceuticals;
- Oncothyreon;
- Peregrine Pharmaceuticals;
- Poniard Pharmaceuticals;
- Sangamo Biosciences;
- · Spectrum Pharmaceuticals;
- Stemcells;
- · Transcept Pharmaceuticals;
- Vical; and
- Zymogenetics.

Because a majority of our named executive officers have been hired from outside our company in the last three years, total cash compensation generally reflects current market values. In order to attract and retain our executive officers, we position our target cash composition between the competitive median and the 75th percentile among the peer group. Base salary is competitively positioned between the median and the 75th percentile, while target bonuses are at the competitive median when expressed as a percentage of base salary and between the median and 75th percentile when expressed in dollars.

Based on findings from the FW Cook report, the compensation committee determined that its historical annual long-term incentive grants (excluding new-hire awards) were significantly below the median of the peer

group. As a result, the annual long-term incentive grants for 2010 were designed to bring total ownership levels for our named executive officers closer to market median levels.

Setting Executive Compensation

As a general proposition, in setting compensation for the named executive officers, other than the Chief Executive Officer, and in developing its recommendations to the board of directors regarding compensation for the Chief Executive Officer, the compensation committee considers a number of factors, including analyses of compensation in similarly-sized companies in the biopharmaceutical industry, analyses of compensation levels in similar companies in our local geographic area, analyses of reports from compensation consultants, the satisfaction of (or failure to satisfy) previously-developed performance measurements for the named executive officer and our company, and the total vested and unvested equity grants owned by the executive. We compete for executive talent across a broad range of business sectors.

The compensation committee believes it is important when making its compensation-related decisions to be informed as to current practices of similarly situated companies in the biotechnology industry. In addition to the report of its compensation consultant, the compensation committee has historically taken into account input from other sources, including input from members of the compensation committee based on their roles as executive officers and directors of other public companies, as well as other members of the board of directors.

The compensation committee believes that the total compensation package provided to our named executive officers, combining both short-term and long-term incentives, some of which are at risk based on individual and our performance, is competitive without being excessive and is at an appropriate level to assure the retention and motivation of this highly skilled and experienced segment of our workforce, and at the same time would be attractive to any additional talent that might be needed in the changing workplace without creating incentives for inappropriate risk-taking by the named executive officers that might be in their own self-interests, but might not necessarily be in the best long and short term interests of our shareholders.

Performance Factors in 2010

The compensation committee, together with the Chief Executive Officer and full board of directors, establishes performance criteria for the named executive officers, both in terms of individual performance and the performance of our company as a whole, and generally assigns a weight to the performance goals.

The following corporate goals, along with the weighting assigned to each of the goals, including the weight achieved, drove the compensation committee's executive compensation decisions for 2010:

| Goal | Assigned Weight | Achieved Weight |
|---|--------------------|--------------------|
| Develop Duchenne Muscular Dystrophy ("DMD") program | 45% | 51% |
| Advance anti-infective programs | 20% | 76% |
| Advance core discovery research projects | 15% | 59% |
| Complete a 3-year business plan and strategy | 5% | 48% |
| Develop the Company externally and internally | 15% | 69% |
| Total | 100% | 60% |

Our Chief Executive Officer's performance bonus is generally based entirely on our achievement of the corporate goals outlined above. This compensation approach applied to Mr. Boyle for 2010 due to his service as our Interim President and Chief Executive Officer. Dr. Hudson was ineligible for a 2010 performance bonus as a result of his resignation in April 2010. The performance bonus of each other named executive officer was based on our achievement of the corporate goals (70%), with the remainder of the performance bonus (30%) for such named executive officers based on the achievement of individual goals.

The goals for each individual officer, along with the weighting assigned to each of the goals, were as follows:

Stephen Shrewsbury, M.D., Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer

Dr. Shrewsbury's individual goals for 2010 revolved around the development and government approvals of several of our drugs under development. They consisted of: achievement of certain goals with respect to DMD (35%); achievement of certain goals with respect to preclinical development (10%); securing removal of an administrative hold on a certain drug by the end of the second quarter and holding certain meetings related thereto (15%); supporting submissions of RFPs for Ebola and Marburg viruses and initiating additional toxicology studies on awards with advanced funding (10%); preparing and initiating certain toxicology programs and overseeing the preparation of certain studies in support of RFP (14%); and supporting submission of RFPs for antiviral programs, submitting orphan drug applications for antiviral programs and holding certain meetings (16%). Based on the compensation committee's assessment of his performance during 2010, the compensation committee determined that he had achieved an overall 86% of his individual goals.

Paul Medeiros, Senior Vice President of Business Development and Chief Business Officer

Mr. Medeiros's individual goals for 2010 revolved around securing licensing arrangements and research funding and development with respect to certain drugs and working to achieve approval of our 3-year strategic plan. They consisted of: executing a certain license agreement under terms favorable to us as evidenced by a successful negotiation within ranges agreed to by our board of directors (40%); securing advancement of our anti-infective program by securing new external research funding within a certain range (20%); co-leading development of new discovery research investment and prioritization plan (15%); leading development of and gaining approval of our 3-year strategic business plan (10%); and executing an out-license or research collaboration agreement with a commercial or scientific partner supporting forward development of one or more of our discovery or pre-clinical research programs (15%). Mr. Medeiros will cease to be an employee and officer of our company effective June 1, 2011, but based on the compensation committee's assessment of his performance during 2010, the compensation committee determined that he had achieved an overall 84% of his individual goals.

Graham Johnson, Ph.D., Senior Vice President of Preclinical Development and Research

Dr. Johnson's individual goals for 2010 focused on certain strategic goals related to research and development for certain programs and recruiting personnel and resources necessary for certain of our strategic research and discovery goals. They consisted of: locating or retaining the necessary resources, initiating research and making meaningful first-pass experimental progress in at least two internal drug discovery programs (40%); identifying appropriate vendors, seeking competing quotes for each work package and developing a first draft of an integrated development plan for a certain program (20%); identifying and recruiting an experienced drug hunter biologist (20%); improving the facilities and environment of the chemistry and biology group by catalyzing the upgrading of fume hoods and functional improvement in certain systems (15%); working with the business group to put in place a web-based document retrieval process adequate to the needs of a publicly-traded biotechnology company (5%). Dr. Johnson ceased to be an employee and officer of our company effective May 13, 2011, but based on the compensation committee's assessment of his performance during 2010, the compensation committee determined that he had achieved an overall 95% of his individual goals.

Determining the Total Mix of Compensation

Our compensation-setting process consists of establishing a targeted overall compensation for each executive and then allocating that compensation between base salary and incentive compensation (annual performance-based cash bonuses and equity incentive awards), based appropriately on publicly available industry and salary survey data. The compensation committee does not have a pre-established policy for allocating total

compensation between cash and non-cash compensation, between long-term and currently paid-out compensation, or between fixed and variable compensation. Rather, based on the competitive market assessments and benchmarks, the reports of our compensation consultants, as well as the compensation committee's review of existing outstanding equity incentives on an individual named executive officer basis, the compensation committee determines the appropriate level and mix of total compensation, keeping in mind our compensation philosophy.

The total amount and mix of compensation payable to our named executive officers is premised upon, among other items, the degree to which the executive has a role in determining our strategic direction, the mix of compensation payable to executives in similar roles by companies of a similar size and in our business sector, geographic location, and industry, as well as the quantity and value of unvested equity awards held by each named executive officer and the vesting date of such awards. As one of our primary priorities is to retain our executives, we seek to ensure our named executive officers receive a base salary reflective of our size and the marketplace in which we compete.

During its evaluation of the appropriate mix of compensation, the compensation committee typically determines what portion of each executive's compensation will be "at risk," with the at risk portion increasing as we give executives greater levels of responsibility. As we believe that many of our named executive officers could command higher salaries in similar roles with larger companies, including with our competitors, our combined cash-based and equity-based bonuses have historically been large relative to base salaries, with the goal of ensuring compensation serves the dual purpose of retention and rewarding exceptional performance.

Analysis of Executive Compensation Components

For 2010, the principal components of compensation for named executive officers were identical to the components in 2009, and included:

- base salary;
- · performance-based cash bonuses;
- long-term incentives in the form of stock options under the 2002 Equity Incentive Plan;
- 401(k) Plan; and
- · other benefits.

Base Salaries

As a general proposition, the base salaries of our executive officers are established as part of an annual compensation adjustment cycle, and we also assess salaries at the time of hire, promotion or other change in responsibilities. In establishing those salaries, the compensation committee considers information about base salaries paid by companies of comparable size in the biopharmaceutical industry (including data from the committee's compensation consultant), individual performance, position and tenure of the executive officer, how the salary compares to the salaries of our other executives, and internal comparability considerations. For 2010, in the aggregate, base salaries to our named executive officers are positioned between the competitive median and the 75th percentile relative to our peer group. We thought this was appropriate in light of our compensation philosophy and the competitive pressures for attracting and retaining talent.

As noted previously, the Chief Executive Officer and each of the named executive officer received a 3% (annualized) increase in base compensation for 2010. In connection with the added responsibilities of serving as interim President and Chief Executive Officer, Mr. Boyle received a monthly base salary increase of \$3,000 for each month he served in such role. In 2010, we hired Dr. Johnson as our Senior Vice President, Preclinical Development and Research and his 2010 base salary was determined as a result of individual negotiations consistent with our competitive base salary positioning.

Consistent with the philosophy and events discussed above, the annual base salary levels for 2009 and 2010 for our named executive officers were as follows:

| Name | Title | Salary 2010 | Salary 2009 | \$ Change | % Change 2009 to 2010 Base Salary |
|-----------------------------|--|-------------|-------------|-----------|---|
| Leslie Hudson, Ph.D.(1) | Former President and Chief Executive Officer | \$494,400 | \$480,000 | \$14,400 | 3.0% |
| J. David Boyle II(2) | Former Interim President and Chief Executive Officer and Current Senior Vice President and Chief Financial Officer | 333,720 | 324,000 | 9,720 | 3.0% |
| Stephen B. Shrewsbury, M.D. | Chief Medical Officer and Senior Vice President, Preclinical, Clinical and Regulatory Affairs | 319,300 | 310,000 | 9,300 | 3.0% |
| Paul Medeiros | Senior Vice President of Business Development and Chief Business Officer | 321,300 | 315,000 | 6,300 | 2.0% |
| Graham Johnson, Ph.D | Senior Vice President of Preclinical Development and Research | 300,000 | _ | N/A | N/A |

- (1) Dr. Hudson tendered his resignation at the request of the board of directors on April 20, 2010.
- (2) In connection with his appointment as Interim President and Chief Executive Officer, Mr. Boyle's salary was increased by \$3,000 per month for each month he served in such role. The 2010 salary figure for Mr. Boyle set forth above does not include this temporary increase.

Performance-Based Cash Bonuses/Equity Awards

We typically grant cash bonuses to executive officers as part of their annual overall compensation. In 2010, the bonuses for executive officers other than the Chief Executive Officer were targeted to be between 0% and 30% of the executive's base compensation; provided, however, that in connection with his promotion to Interim President and Chief Executive Officer, Mr. Boyle's target bonus was increased from 30% to 40% of his base salary. The target had been 60% of base compensation for the former Chief Executive Officer, Dr. Hudson. Such cash bonuses are in recognition of achievement of performance milestones for the individual named executive officers and of milestones achieved by our company as a whole. The compensation committee takes into account our cash resources and our need to deploy those resources to advance our business plan, and assesses this objective against the need to maintain compensation levels that are competitive within the biotechnology industry. For 2010, performance-based bonuses to named executive officers was positioned at the competitive median within our peer group when expressed as a percentage of base salary and between the competitive median and 75th percentile when expressed in aggregate dollars. We thought this was appropriate in light of our compensation philosophy and the competitive pressures for attracting and retaining talent.

As noted above, the compensation committee and the board, in consultation with Dr. Hudson, established corporate performance and individual performance goals for the named executive officers in early 2010. In early 2011, the compensation committee and the board determined that 60% of the corporate goals had been achieved and Mr. Boyle and, with respect to Mr. Boyle, Mr. Garabedian, determined that the other named executive

officers had achieved the percentage of individual goals identified above. The following table shows for each of our named executive officers the aggregate dollar value of the cash bonuses awarded for 2009 and 2010:

| Name | Title | 2010 Bonus | 2009 Bonus | % Change (2009 to 2010) | 2010 Bonus as a % of 2010 Base Salary |
|--------------------------|---|------------|------------|----------------------------|---|
| Leslie Hudson, Ph.D.(1) | Former President and Chief Executive Officer | \$ — | \$181,440 | N/A | N/A |
| J. David Boyle II | Former Interim President and Chief Executive Officer and Current Senior Vice President and Chief Financial Officer | \$ 88,733 | \$ 62,111 | 43% | 27% |
| Paul Medeiros(2) | Senior Vice President of Business Development and Chief Business Officer | \$ 53,978 | \$ 50,000 | 8% | 17% |
| Stephen Shrewsbury, M.D. | Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer | \$ 64,946 | \$ 59,288 | 10% | 20% |
| Graham Johnson, Ph.D.(3) | Senior Vice President, Preclinical Development and Research | \$ 22,031 | s — | N/A | 18% |

- (1) Dr. Hudson tendered his resignation at the request of the board of directors on April 20, 2010 and was ineligible to receive a performance-based cash bonus for 2010.
- (2) Pursuant to the terms of his employment agreement, Mr. Medeiros received a \$50,000 cash bonus in 2009. This figure excludes the \$100,000 signing bonus he received in connection with commencement of his employment in May 2009.
- (3) The 2010 cash bonus figure for Dr. Johnson was pro-rated for his length of service during 2010 and excludes the \$75,000 signing bonus he received in connection with commencement of his employment in August 2010. The 2010 cash bonus as a percentage of Dr. Johnson's 2010 base salary is calculated using pro-rated amounts for his length of service during 2010.

Equity Incentive Plan Compensation

For 2010, the long-term compensation of named executive officers takes the form of stock option awards under our 2002 Equity Incentive Plan ("2002 Plan"). The 2002 Plan is designed to align a significant portion of the executive compensation program with long-term shareholder interests. The 2002 Plan permits the granting of several different types of stock-based awards. The 2002 Plan is administered by the compensation committee. The compensation committee believes that equity-based compensation helps ensure that our named executive officers have a continuing stake in our long-term success, and preserves our cash resources. The 2002 Plan provides incentives to continue in service to us and to create in such executives a more direct interest in the future success of our operations by relating incentive compensation to the achievement of long-term corporate economic objectives. All options granted by us have been granted with an exercise price equal to the closing market price of our common stock on the date of grant and, accordingly, will only have value if our stock price increases subsequent to the date of grant.

In granting options under the 2002 Plan, the compensation committee generally takes into account each named executive officer's responsibilities, relative position in our company, past grants, the total number of vested and unvested equity incentives held by each named executive officer, and approximate grants to individuals in similar positions for companies of comparable size in the biopharmaceutical industry. Based on findings from the FW Cook report, the compensation committee determined that its historical annual long-term incentive grants (excluding new-hire awards) were significantly below the median of our peer group. As a result, the annual long-term incentive grants for 2010 were designed to bring total ownership levels for our named executive officers closer to market median levels.

In addition, the board of directors has delegated to the new employee option committee the authority to approve grants of stock options to newly hired employees who are not our chief executive officer, president, chief financial officer, vice president or a Section 16 officer (as determined pursuant to the rules promulgated under the Securities Exchange Act of 1934). The new employee option committee is composed of our chief executive officer, our chief financial officer and our head of human resources. The new employee option committee meets during the last full week of each month and may only grant stock option awards. The stock options granted by the new employee option committee must have an exercise price equal to the closing sales price of our common stock as reported by The NASDAQ Global Market on the last trading day of the month in which such grants were approved. These grants must fall within a predetermined range approved by the compensation committee and may not deviate from the standard vesting terms. In 2010, the standard vesting terms for awards granted by the new employee option committee were as follows: one-third of the shares subject to the option vest at each anniversary of the employee's start date, such that the shares underlying the option are fully vested on the third anniversary of the employee's start date. Beginning in 2011, the standard vesting terms for awards granted by the new employee option committee were as follows: one-fourth of the shares subject to the option vest at the first anniversary of the employee's start date and the balance of the shares vest in equal monthly increments for 36 months following the first anniversary of the start date, such that the shares underlying the option are fully vested on the fourth anniversary of the employee's start date.

The following table shows the stock options granted to named executive officers in 2009 and 2010:

| Name | Title | FY 2010 Shares Subject to Option Grant | FY 2009 Shares Subject to Option Grant | % Increase/ (Decrease) 2009 to 2010 |
|--------------------------|--|---|---|---|
| Leslie Hudson, Ph.D. | Former President and Chief Executive Officer | 600,000 | 350,000 | 71% |
| J. David Boyle II | Former Interim President and Chief Executive Officer and Current Senior Vice President and Chief Financial Officer | 330,000 | 150,000 | 120% |
| Paul Medeiros | Senior Vice President of Business Development and Chief Business Officer | 205,000 | 400,000 | (49%) |
| Stephen Shrewsbury, M.D. | Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer | 205,000 | 450,000 | (54%) |
| Graham Johnson, Ph.D. | Senior Vice President of Preclinical Development and Research | 400,000 | N/A | N/A |

401(k) Plan

Our 401(k) Plan is a defined contribution profit sharing plan with a 401(k) option. The plan year is January 1 to December 31, and the 401(k) Plan was adopted on November 1, 1992. Employees who are at least twenty-one years of age and who have provided at least thirty days of service are eligible to participate in the 401(k) Plan. Employees who are union employees, non-resident alien employees with no U.S.-source income and non-common law employees are not eligible to participate. Participants may defer up to the maximum allowed by law. At our discretion, participants may receive a match on the first 4% of compensation that the participant contributes to the 401(k) Plan. As of 2010, the named executive officers received a 401(k) contribution match of up to 4% of their 401(k) Plan contribution subject to the maximum amount permitted by law.

Tax and Accounting Implications of the Executive Compensation Program

We generally will be entitled to a tax deduction in connection with compensation paid to our named executive officers at the time the named executive officer recognizes such compensation. Special rules limit the deductibility of compensation paid to our Chief Executive Officer and other "covered employees" as determined under Section 162(m) and applicable guidance. In addition, the long-term incentive compensation awarded to the named executive officers is based on a fixed value at grant and therefore is not subject to variable accounting treatment under Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 718. We view preserving tax deductibility as an important objective, but not the sole objective, in establishing executive compensation. In specific instances we have and in the future will authorize compensation arrangements that are not fully tax deductible but which promote other important objectives.

Repricing of Stock Options

We did not reprice any stock options in 2010.

Employment Agreements with Named Executive Officers

Leslie Hudson, Ph.D. — Former President and Chief Executive Officer

On February 8, 2008, the board of directors appointed Leslie Hudson, Ph.D. as our President and Chief Executive Officer. In connection with his appointment, we and Dr. Hudson entered into an employment agreement providing for Dr. Hudson's at-will employment. Dr. Hudson resigned from his positions with us on April 20, 2010.

Under the terms of his employment agreement, Dr. Hudson was entitled to an initial annual salary of \$480,000, which amount was subject to review for potential increase, but not decrease, on an annual basis. In addition to his base salary, Dr. Hudson was entitled to an annual bonus based upon our and Dr. Hudson's achievement of performance objectives established by our board of directors, with the target bonus level being equal to 60% of Dr. Hudson's base salary. Dr. Hudson's compensation package was extensively negotiated, and Dr. Hudson's compensation was high relative to the compensation payable to other executive officers of our company, including our Interim Chief Executive Officer who served between March 2007 and February 2008. In determining Dr. Hudson's compensation, the board of directors took into account, among other things, the fact that Dr. Hudson was required to relocate from his home in New Jersey, Dr. Hudson's extensive experience in our industry, and the salaries and potential bonuses commanded by principal executive officers at other companies in our industry.

In connection with his employment, we granted to Dr. Hudson options to purchase 667,000 shares of our common stock under our 2002 Plan, with an exercise price equal to the fair market value of our common stock on February 8, 2008, which was \$1.09 per share. Subject to certain exceptions, the options vested in equal annual installments over a period of four years. In addition, on that same date we granted to Dr. Hudson 333,000 restricted shares of our common stock. A portion of the shares of common stock were subject to forfeiture, with

100,000 shares vesting on February 8, 2008 and 233,000 shares vesting in equal annual installments over four years commencing on February 8, 2008. We were also required to reimburse Dr. Hudson for all expenses reasonably incurred by him in discharging his duties for us.

In addition to the compensation described above, Dr. Hudson was entitled under his employment agreement to receive (i) health care benefits for him and his spouse, (ii) reimbursement of up to \$25,000 in legal fees incurred by Dr. Hudson in connection with the negotiation of his employment agreement, (iii) a monthly living allowance of up to \$4,500, (iv) a car allowance of \$1,000 per month and airfare for one round trip per week between his home and our headquarters, (v) reimbursement of actual travel and other business expenses, (v) reimbursement of moving expenses and reasonable and customary costs of selling a residence in Princeton, New Jersey, as well as two round-trip economy fare airplane tickets for relocation purposes for each of Dr. Hudson and his spouse, (vi) during the first year of employment, reimbursement for up to four round trip economy airplane tickets per month for travel actually incurred between Portland, Oregon and his home in Bend, Oregon, (vii) four weeks of paid vacation per year, as well as paid holidays generally available to senior executives, (viii) \$9,500 per year for reasonable expenses incurred in connection with Dr. Hudson's federal and state income tax returns and investment advice, and (ix) subject to eligibility requirements, participation in benefits and programs generally available to all employees or executives. In addition, we were required to provide Dr. Hudson with our standard directors and officers insurance policy, and indemnify and hold Dr. Hudson harmless from liability arising out of his services to the fullest extent permitted by Oregon law. Dr. Hudson's employment agreement further provided that Dr. Hudson was entitled to receive certain tax gross-up payments related to certain of the taxable fringe benefits and any golden parachute or deferred compensation excise or penalty taxes.

Dr. Hudson's employment agreement provided that, for a period of two years following Dr. Hudson's termination of employment with us, Dr. Hudson may not engage in certain activities in competition with our business activities, to the extent those competitive activities relate to five competitors specified by us prior to Dr. Hudson's termination. Dr. Hudson is further prohibited, for a period of two years following termination of employment with us, from recruiting, hiring, or assisting a third party in hiring any person then employed by us. The non-competition and the non-solicitation provisions continue in effect following Dr. Hudson's resignation.

Effective April 20, 2010, Dr. Hudson resigned at the request of our board of directors, which resignation was treated as a termination without Cause (as defined in Dr. Hudson's employment agreement). In connection with his resignation, Dr. Hudson entered into a separation and release agreement with us dated April 22, 2010, the benefits of which are described below in the section "Post-Employment Benefits and Change in Control Arrangements for the Company's Named Executive Officers."

J. David Boyle II — Senior Vice President and Chief Financial Officer

On August 18, 2008, we hired J. David Boyle II as our Senior Vice President and Chief Financial Officer. In connection with his appointment, we and Mr. Boyle entered into an employment agreement dated July 24, 2008 providing for Mr. Boyle's at-will employment. In April 2011, in accordance with the terms of Mr. Boyle's employment agreement, we notified Mr. Boyle that his employment agreement would not be renewed. We will continue to employ Mr. Boyle as our Senior Vice President and Chief Financial Officer on an at-will basis following the expiration of his employment agreement in July 2011. We and Mr. Boyle will determine the terms of his new employment arrangement prior to the expiration of his current employment agreement.

Under the terms of his employment agreement, which will expire pursuant to its terms in July 2011, Mr. Boyle is entitled to an initial annual salary of \$324,000, which amount is subject to review for potential increase, but not decrease, on an annual basis. In addition to his base salary, Mr. Boyle is eligible for an annual bonus of up to 30% of his base salary, based upon Mr. Boyle's achievement of performance objectives established by mutual agreement among Mr. Boyle, our Chief Executive Officer, and the compensation committee. As noted above, Mr. Boyle received a bonus of \$88,733 in connection with his services in 2010.

In connection with his employment, we granted to Mr. Boyle options to purchase 350,000 shares of our common stock under our 2002 Plan, with an exercise price equal to the fair market value of our common stock on August 18, 2008, which was \$1.21 per share. Subject to certain exceptions, the options vest in equal annual installments over a period of three years. In addition, on that same date we granted to Mr. Boyle options to purchase an additional 150,000 shares of our common stock under our 2002 Plan, with an exercise price equal to the fair market value of our common stock on August 18, 2008, which was \$1.21 per share. The vesting of these 150,000 shares is subject to our achievement of certain milestones, which we have not achieved and will not achieve. We are also required to reimburse Mr. Boyle for all expenses reasonably incurred by him in discharging his duties for us.

In addition to the compensation described above, under his employment agreement, Mr. Boyle is entitled to receive (i) reimbursement of up to \$100,000 for reasonable expenses incurred in 2008 to relocate Mr. Boyle, his spouse and certain members of his family to the city of our headquarters, including the reasonable and customary costs associated with selling his prior residence, moving expenses, and costs associated with purchasing a new residence (ii) reimbursement of up to \$5,000 for reasonable legal fees incurred by Mr. Boyle in connection with the negotiation of his employment agreement, (iii) a monthly living allowance of \$2,000 for a period of up to six months, (iv) four weeks of paid vacation per year, as well as paid holidays generally available to senior executives, and (v) subject to eligibility requirements, participation in benefits and programs generally available to all employees or executives. Mr. Boyle's employment agreement further provides that Mr. Boyle is entitled to receive certain tax gross-up payments related to certain of the taxable fringe benefits.

Mr. Boyle's employment agreement provides that, following Mr. Boyle's termination of employment with us, Mr. Boyle may not engage in certain activities in competition with our business activities for a period between one year and two years, depending on the nature of Mr. Boyle's termination, Mr. Boyle is further prohibited for a period of two years following termination of employment with us from recruiting, hiring, or assisting a third party in hiring any person then employed by us.

Effective April 20, 2010, Mr. Boyle was appointed our Interim President and Chief Executive Officer. As a result of this appointment, Mr. Boyle's salary was increased by \$3,000 per month while serving as the Interim President and Chief Executive Officer, his bonus target percentage for 2010 was increased to 40%, and he was granted a fully vested option on April 20, 2010 to acquire 50,000 shares of our common stock at an exercise price of \$1.24. In connection with Mr. Garabedian's appointment as President and Chief Executive Officer and effective January 1, 2011, Mr. Boyle's salary and bonus target percentage returned to \$333,720 annually and 30%, respectively, which levels were in effect prior to his appointment as Interim President and Chief Executive Officer.

For a description of severance and change in control-related payments to Mr. Boyle under his employment agreement, please see the description in the section below captioned "Post-Employment Benefits and Change in Control Arrangements for the Company's Named Executive Officers."

Stephen B. Shrewsbury — Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer

On January 26, 2009, we hired Stephen Bevan Shrewsbury, M.D., as our Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer. In connection with his hiring, we and Dr. Shrewsbury entered into an employment agreement dated January 26, 2009 providing for Dr. Shrewsbury's at-will employment. Under the terms of his employment agreement, Dr. Shrewsbury is entitled to an initial annual salary of \$310,000, which amount is subject to review for potential increase, but not decrease, on an annual basis. In addition to his base salary, Dr. Shrewsbury is eligible for an annual bonus of up to 25% of his base salary, based upon Dr. Shrewsbury's achievement of performance objectives established by mutual agreement among Dr. Shrewsbury, our Chief Executive Officer, and the compensation committee. As noted above, Dr. Shrewsbury received a bonus of \$64,946 in connection with his services in 2010.

In connection with his employment, we granted to Dr. Shrewsbury options to purchase 450,000 shares of our common stock under our 2002 Plan, with an exercise price equal to the fair market value of our common stock on January 26, 2009, which was \$1.36 per share. Subject to certain exceptions, the options vest in equal annual installments over a period of three years. In addition, on that same date we granted to Dr. Shrewsbury 60,000 restricted shares of our common stock. The shares became fully vested as of July 27, 2009. We are also required to reimburse Dr. Shrewsbury for all expenses reasonably incurred by him in discharging his duties for us.

In addition to the compensation described above, under his employment agreement, Dr. Shrewsbury is entitled to receive (i) reimbursement of up to \$100,000 for reasonable expenses incurred in 2008 to relocate Dr. Shrewsbury to the city of our headquarters, including the reasonable and customary costs associated with purchasing a new residence and moving expenses, (ii) reimbursement of up to \$3,000 for reasonable legal fees incurred by Dr. Shrewsbury in connection with the negotiation of his employment agreement, (iii) a monthly living allowance of \$2,500 for a period of up to six months, (iv) four weeks of paid vacation per year, as well as paid holidays generally available to senior executives, and (v) subject to eligibility requirements, participation in benefits and programs generally available to all employees or executives. Dr. Shrewsbury's employment agreement further provides that Dr. Shrewsbury is entitled to receive certain tax gross-up payments.

Dr. Shrewsbury's employment agreement provides that, following Dr. Shrewsbury's termination of employment with us, Dr. Shrewsbury may not engage in certain activities in competition with our business activities for a period between one year and two years, depending on the nature of Dr. Shrewsbury's termination. Dr. Shrewsbury is further prohibited for a period of two years following termination of employment with us from recruiting, hiring, or assisting a third party in hiring any person then employed by us.

For a description of severance and change in control-related payments to Dr. Shrewsbury under his employment agreement, please see the description in the section below captioned "Post-Employment Benefits and Change in Control Arrangements for the Company's Named Executive Officers."

Paul Medeiros — Senior Vice President of Business Development and Chief Business Officer

Effective May 19, 2009, we hired Paul Medeiros as our Senior Vice President of Business Development and Chief Business Officer. In connection with his hiring, we and Mr. Medeiros entered into an employment agreement dated May 19, 2009 providing for Mr. Medeiros' at-will employment. Under the terms of his employment agreement, Mr. Medeiros is entitled to an initial annual salary of \$315,000 per year, which amount is subject to review for potential increase, but not decrease, on an annual basis. In addition to his base compensation, Mr. Medeiros is eligible for an annual bonus up to 25% of his annual basis compensation amount, subject to achievement and satisfaction of goals and objectives established upon mutual agreement of our Chief Executive Officer, our compensation committee and Mr. Medeiros. As noted above, Mr. Medeiros received a bonus of \$53,978 in connection with his services in 2010.

In connection with his employment, we granted to Mr. Medeiros options to purchase 400,000 shares of our common stock under our 2002 Plan, with an exercise price equal to the fair market value of our common stock on May 19, 2009, which was \$1.10 per share. Subject to certain exceptions, the options vest in equal annual installments over a period of three years. In addition, on that same date we granted to Mr. Medeiros 100,000 restricted shares of our common stock, which will vest on a pro rata basis through the first anniversary of Mr. Medeiros' employment, subject to certain performance-based criteria. As of the date hereof, the performance criterion has not been achieved and we believe the achievement thereof will not occur in light of the termination of Mr. Medeiros' employment with us which will take effect on June 1, 2011.

In addition to his base compensation for 2009, we agreed to pay Mr. Medeiros a \$100,000 sign-on bonus. If Mr. Medeiros had separated from employment with us prior to his one-year anniversary for reasons of (i) termination of Mr. Medeiros by us for "Cause" (as defined in Mr. Medeiros' employment agreement) or

(ii) voluntary termination by Mr. Medeiros other than for "Good Reason" (as defined in Mr. Medeiros' employment agreement), the sign-on bonus was completely refundable to us. We are also required to reimburse Mr. Medeiros for all expenses reasonably incurred by him in discharging his duties for us.

In addition to the compensation described above, under his employment agreement, Mr. Medeiros is entitled to receive (i) reimbursement of up to \$120,000 in 2010 for reasonable expenses incurred in 2009 and 2010 to relocate Mr. Medeiros to the location of our headquarters, including the reasonable and customary costs associated with purchasing a new residence and moving expenses, (ii) reimbursement of up to \$5,000 for reasonable legal fees incurred by Mr. Medeiros in connection with the negotiation of the employment agreement, (iii) a monthly living allowance of \$2,500 for a period of up to six months, (iv) four weeks of paid vacation per year, as well as paid holidays generally available to senior executives, and (v) subject to eligibility requirements, participation in benefits and programs generally available to all employees or executives.

Mr. Medeiros' employment agreement provides that, following Mr. Medeiros' termination of employment with us, Mr. Medeiros may not engage in certain activities in competition with our business activities for a period between one year and two years, depending on the nature of Mr. Medeiros' termination. Mr. Medeiros is further prohibited for a period of two years following termination of employment with us from recruiting, hiring, or assisting a third party in hiring any person then employed by us.

For a description of severance and change in control-related payments to Mr. Medeiros under his employment agreement, please see the description in the section below captioned "Post-Employment Benefits and Change in Control Arrangements for the Company's Named Executive Officers."

Graham Johnson — Senior Vice President, Preclinical Development and Research

On August 15, 2010, we hired Graham Johnson, Ph.D., as our Senior Vice President, Preclinical Development and Research. In connection with his hiring, we and Dr. Johnson entered into an offer letter dated July 9, 2010 providing for Dr. Johnson's at-will employment by us. Under the terms of his offer letter, Dr. Johnson is entitled to an initial annual salary of \$300,000. As an incentive for joining our company, Dr. Johnson received a sign-on bonus of \$75,000, which must generally be returned if Dr. Johnson is terminated for cause or voluntarily terminates his employment prior to the 1-year anniversary of his hiring. In addition, Dr. Johnson is eligible for an annual bonus of up to 25% of his base salary, based upon Dr. Johnson's achievement of performance objectives. Dr. Johnson's bonus for 2010 was prorated for his partial year of service. As noted above, Dr. Johnson received a bonus of \$22,031 in connection with his services in 2010.

In connection with his employment, we granted to Dr. Johnson options to purchase 400,000 shares of our common stock under our 2002 Plan, with an exercise price equal to the fair market value of our common stock on August 23, 2010, which was \$2.03 per share. Subject to certain exceptions, the options vest in equal annual installments over a period of three years.

In addition to the compensation described above, under his employment agreement, Dr. Johnson is entitled to receive (i) reimbursement of up to \$120,000 for reasonable expenses incurred to relocate Dr. Johnson to the city of our headquarters within one year of the hire date, and (ii) a monthly living allowance of \$4,000 for a period of nine months. Dr. Johnson's employment agreement further provides that Dr. Johnson is entitled to receive certain tax gross-up payments to the extent these fringe benefits are taxable.

For a description of severance and change in control-related payments to Dr. Johnson under his employment agreement, please see the description in the section below captioned "Post-Employment Benefits and Change in Control Arrangements for the Company's Named Executive Officers."

Post-Employment Benefits and Change in Control Arrangements for the Company's Named Executive Officers

We do not generally provide special post-employment benefits to our named executive officers, other than those available to our employees generally. However, we have entered into agreements with certain named executive officers relating to post-employment benefits and change in control arrangements.

Leslie Hudson, Ph.D. — Former President and Chief Executive Officer

Upon termination of Dr. Hudson's employment by us without Cause (as defined in Dr. Hudson's employment agreement) or by Dr. Hudson for Good Reason (as defined in Dr. Hudson's employment agreement) where no Change in Control (as defined in Dr. Hudson's employment agreement) has occurred, we were required to pay to Dr. Hudson (i) all base compensation and earned but unpaid bonuses, and unpaid reimbursements, gross-up payments and other unpaid expenses due at the effective date of termination, (ii) the sum of (x) two years of base compensation, (y) two years of bonus compensation based on the average of the past two years' bonuses actually paid or, if only one year's bonus has been paid, such bonus, or if no bonus has been paid, 50% of the target bonus for the current year, and (z) two times the then current annual cost of health benefits. In addition, all unvested options and all shares of common stock will immediately become fully vested and exercisable. The exercise period of all vested options granted to Dr. Hudson pursuant to our 2002 Equity Incentive Plan will be the earlier of their original expiration date or six months from the effective date of termination.

Effective April 20, 2010, Dr. Hudson resigned at the request of the board of directors, which resignation was treated as a termination without Cause where no Change in Control had occurred. In connection with his resignation, on April 20, 2010, we entered into a separation agreement with Dr. Hudson (the "Separation Agreement"), the terms of which were previously negotiated pursuant to Dr. Hudson's employment agreement. Pursuant to the terms of the Separation Agreement, Dr. Hudson will receive total cash severance payments of \$1,412,170 (the "Cash Severance Payments"), calculated by reference to two (2) times the sum of: (i) his annual base salary in effect as of the Separation Date (\$494,400), (ii) the average of his last two annual bonuses (\$188,669), and (iii) the annual cost of Pfizer retiree healthcare coverage for him and his spouse (\$23,016). The Cash Severance Payments will be made to Dr. Hudson in twenty-four (24) equal monthly installments, less required deductions and withholdings, over the twenty-four (24) month period following the effective date of the Separation Agreement. In addition, as of the effective date of the Separation Agreement, previously granted options to Dr. Hudson for 333,500 shares and 116,500 shares of restricted stock immediately became fully vested and exercisable.

J. David Boyle II — Senior Vice President and Chief Financial Officer

Upon Mr. Boyle's voluntary termination of employment (other than with Good Reason (as defined in Mr. Boyle's employment agreement), we must pay to him all compensation due through the date of termination, but otherwise have no further obligation to him in respect of any period following such termination. Upon Mr. Boyle's death, we must pay to his estate all compensation due at the date of death, plus a continuation of base compensation at the rate set forth in his employment agreement or Mr. Boyle's then-current rate, whichever is greater, from the date of death to the final day of the month following the month in which the death occurs.

Under his employment agreement, Mr. Boyle is entitled to receive severance pay of one year's base salary following termination of his employment by us other than for Cause (as defined in Mr. Boyle's employment agreement) and other than in connection with a Change in Control (as defined in Mr. Boyle's employment agreement). Mr. Boyle is entitled to receive severance pay of two years' base salary if he is terminated by us without Cause in connection with a Change in Control or if he voluntary terminates his employment for Good Reason. Further, upon any termination other than for Cause or a termination with Good Reason in connection with a Change in Control, Mr. Boyle's employment agreement provides for full vesting of all outstanding stock options, which are exercisable for a period of 180 days following the effective date of termination. Mr. Boyle's

employment agreement generally provides for a cut-back to the extent that Mr. Boyle may be subject to a golden parachute excise tax under Code Section 280G. However, due to uncertainties in the application of such provision and in light of Mr. Boyle potentially being provided payments subject to such an excise tax, we will provide Mr. Boyle a tax-neutral gross up if amounts are paid to Mr. Boyle that are subject to the excise tax.

Stephen B. Shrewsbury, M.D. — Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer

Upon Dr. Shrewsbury's voluntary termination of employment (other than with Good Reason (as defined in Dr. Shrewsbury's employment agreement), we must pay to him all compensation due through the date of termination, but otherwise have no further obligation to him in respect of any period following such termination. Upon Dr. Shrewsbury's death, we must pay to his estate all compensation due at the date of death, plus a continuation of base compensation at the rate set forth in his employment agreement or Dr. Shrewsbury's then-current rate, whichever is greater, from the date of death to the final day of the month following the month in which the death occurs.

Under the terms of his employment agreement, Dr. Shrewsbury is entitled to receive severance pay of one year's base salary following termination of his employment by us other than for Cause (as defined in Dr. Shrewsbury's employment agreement) and other than in connection with a Change in Control (as defined in Dr. Shrewsbury's employment agreement). Dr. Shrewsbury is entitled to receive severance pay of two year's base salary if he is terminated by us without Cause in connection with a Change in Control or if he voluntary terminates his employment for Good Reason in connection with a Change in Control, Further, upon any termination other than for Cause or a termination with Good Reason in connection with a Change in Control, Dr. Shrewsbury's employment agreement provides for full vesting of all outstanding stock options, which are exercisable for a period of 180 days following the effective date of termination. Dr. Shrewsbury's employment agreement generally provides for a cut-back to the extent that Dr. Shrewsbury may be subject to a golden parachute excise tax under Code Section 280G. However, due to uncertainties in the application of such provision and in light of Dr. Shrewsbury potentially being provided payments subject to such an excise tax, we will provide Dr. Shrewsbury a tax-neutral gross up if amounts are paid to Dr. Shrewsbury that are subject to the excise tax.

Paul Medeiros — Senior Vice President of Business Development and Chief Business Officer

Upon Mr. Medeiros' voluntary termination of employment (other than with Good Reason (as defined in Mr. Medeiros' employment agreement), we must pay to him all compensation due through the date of termination, but otherwise have no further obligation to him in respect of any period following such termination. Upon Mr. Medeiros' death, we must pay to his estate all compensation due at the date of death, plus a continuation of base compensation at the rate set forth in his employment agreement or Mr. Medeiros' then-current rate, whichever is greater, from the date of death to the final day of the month following the month in which the death occurs.

Under the terms of his employment agreement, Mr. Medeiros is entitled to receive severance pay of one year's base salary following termination of his employment by us other than for Cause (as defined in Mr. Medeiros' employment agreement) and other than in connection with a Change in Control (as defined in Mr. Medeiros' employment agreement). Mr. Medeiros is entitled to receive severance pay of two year's base salary if he is terminated by us without Cause in connection with or after a Change in Control or if he voluntary terminates his employment for Good Reason in connection with or within 24 months after a Change in Control. Further, upon termination other than for Cause in connection with or after a Change in Control or a termination with Good Reason in connection with or within 24 months after a Change in Control, Mr. Medeiros' employment agreement provides for full vesting of all outstanding stock options, restricted stock units and other long-term compensation benefits, and stock options will be exercisable for a period of 180 days following the effective date of termination. Mr. Medeiros' employment agreement generally provides for a cut-back to the extent that Mr. Medeiros may be subject to a golden parachute excise tax under Code Section 280G. However, due to uncertainties in the application of such provision and in light of Mr. Medeiros potentially being provided

payments subject to such an excise tax, we will provide Mr. Medeiros a tax-neutral gross up if amounts are paid to Mr. Medeiros that are subject to the excise tax

Mr. Medeiros' employment with us will terminate effective June 1, 2011. Pursuant to the terms of a separation and release agreement that we expect to enter into with Mr. Medeiros in connection with the termination of his employment, Mr. Medeiros will receive a lump sum severance payment of \$321,300 (the equivalent of 12 months of his 2010 base salary) and all of his unvested options will immediately vest and be exercisable for a period of 180 days following June 1, 2011.

Graham Johnson — Senior Vice President, Preclinical Development and Research

Under the terms of his offer letter, upon Dr. Johnson's termination of employment by us other than for Cause (as defined in Dr. Johnson's employment agreement) in connection with a Change in Control (as defined in Dr. Johnson's employment agreement) or upon Dr. Johnson's voluntary termination of employment in connection with a Change in Control, Dr. Johnson receives full vesting of all outstanding stock options, which will be exercisable for a period of 180 days following the effective date of termination.

Dr. Johnson's employment with us terminated effective May 13, 2011. Pursuant to the terms of a separation agreement and release that we entered into with Dr. Johnson in connection with the termination of his employment, Dr. Johnson will receive a lump sum severance payment of \$75,000 (the equivalent of three months of his 2010 base salary) and be eligible for reimbursement of up to \$5,000 for relocation expenses.

Compensation Committee Report

The information contained in this report will not be deemed to be "soliciting material" or to be "filed" with the SEC, nor will such information be incorporated by reference into any future filing under the Securities Act or the Exchange Act, except to the extent that we specifically incorporate it by reference in such filing.

In reliance on the reviews and discussions referred to above and the review and discussion of the section captioned "Compensation Discussion and Analysis" with our management, the compensation committee has recommended to the board of directors and the board of directors has approved, that the section captioned "Compensation Discussion and Analysis" be included in this Annual Report on Form 10-K and the proxy statement for our annual meeting of shareholders.

COMPENSATION COMMITTEE

William A. Goolsbee (Chairman) M. Kathleen Behrens John Hodgman

Summary Compensation Table

The table below summarizes the total compensation paid or earned by each of the named executive officers for 2010. Based on the fair value of equity awards granted to named executive officers in 2010 and the base salary of the named executive officers, "Salary" accounted for, on average, approximately 32% of the total compensation of the named executive officers, incentive compensation including cash bonus and stock option

grants, accounted for approximately 55% of the total compensation of the named executive officers and benefits accounted for approximately 13% of the total compensation of named executive officers:

N--- E-----

| Name and Principal Position (a) | Year (b) | Salary (\$) | Bonus (\$)(1) (d) | Stock Awards (\$)(2) (e) | Option Awards (\$)(2) | Inco | entive Plan mpensation (3) (g) | Il Other npensation (i) | _ | Total (\$) |
|---|----------------------|---------------------------------|-------------------------|-----------------------------------|---------------------------------|------|--------------------------------|------------------------------------|----|-------------------------------------|
| J. David Boyle II Former Interim President and Chief Executive Officer and Current Senior Vice President and Chief Financial Officer(4) | 2010 2009 2008 | \$358,396 324,000 93,462 | _ _ _ | \$ 42,579 — | \$328,099 117,000 510,000 | \$ | 88,733 62,111 72,973 | \$ 9,800 19,437 158,367 | \$ | 785,028 565,127 834,802 |
| Paul Medeiros Senior Vice President of Business Development and Chief Business Officer(5) | 2010 2009 | \$320,775 167,192 | \$100,000 | \$110,000 | \$225,197 372,000 | \$ | 53,978 50,000 | \$ 59,800 11,628 | \$ | 659,750 810,820 |
| Stephen Shrewsbury, M.D. Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer(6) | 2010 2009 | \$324,049 264,295 | _ | \$ 81,600 | \$225,197 513,000 | \$ | 64,946 59,288 | \$ 29,612 55,558 | \$ | 643,803 973,741 |
| Graham Johnson, Ph.D. Senior Vice President of Preclinical Development and Research(7) | 2010 | \$ 88,846 | \$ 75,000 | _ | \$549,480 | \$ | 22,031 | \$ 11,691 | \$ | 747,048 |
| Leslie Hudson, Ph.D. Former President and Chief Executive Officer(8) | 2010 2009 2008 | \$217,489 480,000 411,551 | | \$114,378 362,970 | \$636,180 273,000 613,640 | \$ | — 181,440 196,020 | \$ 438,471 94,101 195,481 | | 1,292,140 1,142,919 1,779,651 |

- (1) Bonus awards paid under our annual cash incentive bonus plan are included in the "Non-Equity Incentive Plan Compensation" column. These payments were made based on predetermined performance metrics. See footnote 3 below.
- (2) The amounts included in the "Stock Awards" and "Option Awards" columns reflect the aggregate grant date fair value of awards during each year calculated in accordance with FASB ASC Topic 718.

 Assumptions used in the calculation of this amount are included in Note 3 to the financial statements set forth in our Annual Report on Form 10-K for 2010, filed with the SEC on March 15, 2011. See the table below captioned "Grants of Plan Based Awards for 2010" for additional information on equity awards granted in 2010.
- (3) Non-Equity Incentive Plan Compensation includes awards earned under our annual cash incentive bonus plan. See the table below captioned "Grants of Plan Based Awards for 2010" and the "Compensation Discussion and Analysis" above for additional information.
- (4) Mr. Boyle served as our Interim President and Chief Executive Officer from April 20, 2010 to December 31, 2010 during which period he received a monthly base salary increase of \$3,000. Mr. Boyle continues to serve as Senior Vice President and Chief Financial Officer. The amounts disclosed under the column entitled "All Other Compensation" include the following: for 2010, \$9,800 represents matching funds contributed to Mr. Boyle's 401(k) account by us; for 2009, \$9,637 is related to temporary living and travel expenses and \$9,800 represents matching funds contributed to Mr. Boyle's 401(k) account by us; and for 2008, \$156,207 is related to relocation and temporary living expenses and \$2,160 represents matching funds contributed to Mr. Boyle's 401(k) account by us.
- (5) Mr. Medeiros was appointed as our Senior Vice President of Business Development and Chief Business Officer in 2009. Pursuant to the terms of his May 2009 employment agreement with us, Mr. Medeiros received a signing bonus of \$100,000, which amount is set forth under the column entitled "Bonus," and also received a contractually guaranteed bonus of \$50,000 for 2009 under our annual cash incentive bonus plan, which amount is set forth under the column entitled "Non-Equity Incentive Plan Compensation." The amounts disclosed under the column entitled "All Other Compensation" include the following: for 2010, \$50,000 is related to relocation and temporary living expenses and \$9,800 represents matching funds contributed to Mr. Medeiros's 401(k) account by us, and for 2009, \$6,378 is related to legal expenses reimbursed to Mr. Medeiros pursuant to the terms of his employment agreement and \$5,250 represents matching funds contributed to Mr. Medeiros's 401(k) account by us.
- (6) Dr. Shrewsbury was appointed as Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer in 2009. The amounts disclosed under the column entitled "All Other Compensation" include the following: for 2010, \$9,800 represents matching funds contributed to Dr. Shrewsbury's 401(k) account by us, \$4,812 is related to relocation expenses and \$15,000 is related to financial advisory services; and for 2009, \$45,758 is related to relocation expenses and \$9,800 represents matching funds contributed to Dr. Shrewsbury's 401(k) account by us.
- (7) Dr. Johnson was appointed as our Senior Vice President of Preclinical Development and Research in 2010. Pursuant to the terms of his July 2010 offer letter, Dr. Johnson received a signing bonus of \$75,000, which amount is set forth under the column entitled "Bonus." The amounts disclosed under the column entitled "All Other Compensation" include the following: for 2010, \$6,555 represents matching funds contributed to Dr. Johnson's 401(k) account by us and \$5,136 is related to relocation expenses.

(8) Dr. Hudson tendered his resignation at the request of the board on April 20, 2010. Dr. Hudson elected to receive his cash incentive bonus earned in 2008 of \$196,020 in shares, which amount is set forth under the column entitled "Non-Equity Incentive Plan Compensation." In lieu of cash, 213,065 shares of our common stock were issued on February 10, 2009 at \$0.92 per share. The amounts disclosed under the column entitled "All Other Compensation" include the following: for 2010, \$26,144 is related to temporary living expenses, \$13,870 is related to financial services and \$398,457 is related to cash severance costs; for 2009, \$84,301 is related to temporary living expenses and \$9,800 represents matching funds contributed to Dr. Hudson's 401(k) account by us; and for 2008, \$186,281 is related to relocation and temporary living expenses and \$9,200 represents matching funds contributed to Dr. Hudson's 401(k) account by us.

See the discussion above under the section captioned "Employment Agreements with Named Executive Officers" for a discussion of our employment arrangements with our named executive officers.

Grants of Plan Based Awards in 2010

| | | Estimated Future Payouts Under Non-Equity Incentive Plan Awards (2) | | | icentive | All Other Option Awards: | Exercise | Grant Date Fair |
|--|---|---|----------------|-------------|-----------------|---|---|--|
| Name | Award | Grant Date (1) | Threshold (\$) | Target (\$) | Maximum (\$) | Number of Securities Underlying Options (#) | or Base Price of Option Awards (\$) | Value of Stock and Option Awards (\$)(3) |
| (a) | 0: 10: | (b) | (c) | (d) | (e) | (j) | (k) | (1) |
| David Boyle II(4) Former Interim President and Chief Executive Officer and Current Senior Vice President and Chief Financial Officer | Stock Options Stock Options Stock Options Annual Incentive | 2/9/2010 3/9/2010 4/20/2010 | _ | \$100,116 | _ | 180,000 100,000 50,000 | \$ 1.45 1.30 1.24 | \$ 190,854 95,070 42,175 |
| Paul Medeiros(5) Senior Vice President of Business Development and Chief Business Officer | Stock Options Stock Options Annual Incentive | 2/9/2010 8/23/2010 | _ | \$ 80,325 | _ | 180,000 25,000 | \$ 1.45 2.03 | \$ 190,854 34,343 |
| Stephen Shrewsbury, M.D.(6) Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer | Stock Options Stock Options Annual Incentive | 2/9/2010 8/23/2010 | _ | \$ 95,790 | _ | 180,000 25,000 | \$ 1.45 2.03 | \$ 190,854 34,343 |
| Graham Johnson, Ph.D.(7) Senior Vice President of Preclinical Development and Research | Stock Options Annual Incentive | 8/23/2010 | _ | \$ 75,000 | _ | 400,000 | \$ 2.03 | \$ 549,480 |
| Leslie Hudson, Ph.D.(8) Former President and Chief Executive Officer | Stock Options Annual Incentive | 2/9/2010 | _ | N/A | _ | 600,000 | \$ 1.45 | \$ 636,180 |

- (1) Consistent with the provisions of our 2002 Equity Incentive Plan in effect at the date of grant, options were priced at the last reported sale price of our common stock on The NASDAQ Global Market on the date of grant, or, if The NASDAQ Global Market was closed on such day, the last day prior to the grant date on which such market was open.
- (2) Annual incentive bonuses were earned in 2010. The actual amounts paid to each of the named executive officers for 2010 are set forth in the individual footnotes below.
- (3) These amounts represent the grant date fair value of option awards granted in 2010. These amounts do not represent the actual amounts paid to or realized by the named executive officer for these awards during 2010. For a more detailed description of the assumptions used for purposes of determining grant date fair value see Note 2 to the financial statements set forth in our Annual Report on Form 10-K for 2010, filed with the SEC on March 15, 2011.
- (4) On February 14, 2011, the compensation committee approved an annual incentive bonus of \$88,733.
- (5) On February 14, 2011, the compensation committee approved an annual incentive bonus of \$53,978.
- (6) On February 14, 2011, the compensation committee approved an annual incentive bonus of \$64,946.
- (7) On February 14, 2011, the compensation committee approved an annual incentive bonus of \$22,031.
- (8) Dr. Hudson resigned as our President and Chief Executive Officer in April 2010 at the request of the board of directors and was ineligible to receive an annual incentive bonus for 2010.

Outstanding Equity Awards at 2010 Year End

| | Option Awards | | | | | |
|---|--|--|----|--------------------------------------|---|--|
| Name | Number of Securities Underlying Unexercised Options (#) Exercisable | Number of Securities Underlying Unexercised Options (#) Unexercisable | | ns Exercise rice (\$) | Option Expiration Date | |
| (a) | (b) | (c) | | (e) | (f) | |
| J. David Boyle II, Former Interim President and Chief Executive Officer and Current Senior Vice President and Chief Financial Officer | 233,334 50,000 — — 50,000 | 116,666(1) 100,000(2) 180,000(3) 100,000(4) — (5) | \$ | 1.21 0.92 1.45 1.30 1.24 | 8/18/2018 2/10/2019 2/9/2020 3/9/2020 4/20/2020 | |
| Paul Medeiros, Senior Vice President of Business Development and Chief Business Officer | 133,334 | 266,666(6) 180,000(3) 25,000(7) | \$ | 1.10 1.45 2.03 | 5/19/2019 2/9/2020 8/23/2020 | |
| Stephen Shrewsbury, M.D., Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer | 150,000 — — | 300,000(8) 180,000(3) 25,000(7) | \$ | 1.36 1.45 2.03 | 1/26/2019 2/9/2020 8/23/2020 | |
| Graham Johnson, Ph.D., Senior Vice President of Preclinical Development and Research | _ | 400,000(7) | \$ | 2.03 | 8/23/2020 | |
| Leslie Hudson, Ph.D., Former President and Chief Executive Officer(9) | _ | _ | | _ | _ | |

- This stock option fully vests on August 18, 2011, and vests at a rate of 1/3 annually on the anniversary of grant.
- This stock option fully vests on February 10, 2012, and vests at a rate of 1/3 annually on the anniversary of grant.
- This stock option fully vests on February 9, 2013, and vests at a rate of 1/3 annually on the anniversary of grant.
- This stock option fully vests on March 9, 2013, and vests at a rate of 1/3 annually on the anniversary of grant.
- (5) Effective upon his appointment as Interim President and Chief Executive Officer, Mr. Boyle was granted a fully vested option to acquire 50,000 shares of our common stock with an exercise price of \$1.24 per share.

 This stock option fully vests on May 19, 2012, and vests at a rate of 1/3 annually on the anniversary of grant.

 This stock option fully vests on August 23, 2013, and vests at a rate of 1/3 annually on the anniversary of grant.

- This stock option fully vests on January 26, 2012, and vests at a rate of 1/3 annually on the anniversary of grant.
- Dr. Hudson resigned as our President and Chief Executive Officer in April 2010 at the request of the board of directors, which resignation was treated as a termination without cause. Accordingly, effective April 20, 2010, all of Dr. Hudson's unvested options became fully vested and exercisable until October 20, 2010.

2010 Option Exercises and Stock Vested

| | Option | awards | Stock awards | | |
|--|--|----------------------------------|---|---------------------------------|--|
| Name | Number of Shares Acquired on Exercise (#) | Value Realized on Exercise | Number of Shares Acquired on Vesting | Value Realized on Vesting | |
| (a) | (b) | (\$) (c) | (#) (d) | (\$) (e) | |
| Leslie Hudson, Ph.D.(1) | (2) | (i) | (=) | (4) | |
| Former President and Chief Executive Officer | 1,617,000 | \$911,088 | 174,750 | \$ 216,690 | |

⁽¹⁾ Besides Dr. Hudson, our Former President and Chief Executive Officer, none of our named executive officers exercised any stock options during 2010 or vested in any restricted stock.

2010 Pension Benefits

None of our named executive officers are entitled to pension benefits or other payments of benefits pursuant to any established plan following retirement.

2010 Nonqualified Deferred Compensation

None of our named executive officers are entitled to benefits under any nonqualified defined contribution or nonqualified deferred compensation plans.

Potential Payments Upon Termination or a Change in Control

The table below reflects the amount of compensation payable to each of our named executive officers in the event of termination of such executive's employment (either before or in connection with a change in control) or in the event of a change in control without termination of such executive's employment. The amount of compensation payable to each named executive officer upon (i) termination without cause before a change in control, (ii) termination without cause in connection with a change in control or resignation for good reason in connection with a change in control and (iii) in connection with a change in control, is shown below. The amounts shown assume that such termination or change in control, as applicable, was effective as of December 31, 2010, and thus includes amounts earned through such time and are estimates of the amounts which would be paid out to the executives upon the occurrence of the relevant triggering event.

After Change

| Benefit (a) Cash Severance Stock Options | Before Change in Control, Termination w/o Cause (S) (b) \$ 333,720 428,766(3) | in Control, Termination w/o Cause or Resignation for Good Reason (\$) (c) \$ 667,440 428,766(3) | Change in Control (\$)(1) (g) \$428,766 |
|---|--|--|--|
| | | | |
| Cash Severance Stock Options Restricted Stock | \$1,412,170 212,050 567,082 | _ _ _ | _ _ _ |
| Cash Severance Stock Options | \$ 36,000(3) | \$ 36,000(3) | \$ 36,000 |
| Cash Severance Stock Options | \$ 321,300 394,849(3) | \$ 642,600 394,849(3) | \$394,849 |
| Cash Severance Stock Options | \$ 319,300 350,850(3) | \$ 638,600 350,850(3) | \$350,850 |
| | (a) Cash Severance Stock Options Cash Severance Stock Options Restricted Stock Cash Severance Stock Options Cash Severance Stock Options Cash Severance | Benefit in Control, Termination w/o Cause (S) (a) (b) Cash Severance Stock Options \$ 333,720 Cash Severance Stock Options \$ 1,412,170 Stock Options Stock Options \$ 212,050 Restricted Stock \$ 567,082 Cash Severance Stock Options \$ 36,000(3) Cash Severance Stock Options \$ 321,300 Stock Options \$ 394,849(3) | Benefit Before Change in Control, Termination w/o Cause or Resignation for Good Reason (\$) (a) (b) (c) Cash Severance Stock Options \$ 333,720 \$ 667,440 At 28,766(3) \$ 428,766(3) \$ 428,766(3) Cash Severance Stock Options \$ 212,050 — Restricted Stock \$ 567,082 — Cash Severance Stock Options \$ 36,000(3) \$ 36,000(3) Cash Severance Stock Options \$ 321,300 \$ 642,600 Stock Options \$ 394,849(3) \$ 394,849(3) Cash Severance Stock Options \$ 319,300 \$ 638,600 |

- (1) Pursuant to the terms of our 2002 Equity Incentive Plan, upon the occurrence of a change in control (as defined in the 2002 Equity Incentive Plan) of our company, all awards granted pursuant to such plan shall immediately become exercisable or shall vest without any further action or passage of time. The stated dollar amounts in this column reflect the spread value of all unvested stock options held by each named executive officer, excluding Dr. Hudson, on December 31, 2010, assuming a stock price of \$2.12 per share, the closing price of our common stock on The NASDAQ Global Market on December 31, 2010.
- (2) Upon termination of Mr. Boyle's employment by us without cause (as defined in Mr. Boyle's employment agreement) and other than in connection with a change in control (as defined in Mr. Boyle's employment

agreement) (i) we shall pay to Mr. Boyle 12 months of his then current base compensation and (ii) all unvested options shall immediately vest and be exercisable for a period of 180 days following the effective date of termination. Upon termination of Mr. Boyle's employment by us without cause in connection with a change in control or upon Mr. Boyle's voluntary termination of employment for good reason (as defined in Mr. Boyle's employment agreement) (i) we shall pay to Mr. Boyle 24 months of his then current base compensation (ii) and all unvested options shall immediately vest and be exercisable for a period of 180 days following the effective date of termination. The receipt of the benefits described herein is contingent upon Mr. Boyle signing a form of separation and release agreement attached as an exhibit to his employment agreement.

- (3) The stated dollar amounts reflect the spread value of all unvested stock options held by the applicable named executive officer on December 31, 2010, assuming a stock price of \$2.12 per share, the closing price of our common stock on The NASDAQ Global Market on December 31, 2010.
- (4) Cash severance is payable in equal monthly installments over 24 months for Dr. Hudson. As of January 2011, 16 monthly payments will be made to Dr. Hudson, with the final payment made in April 2012.
- (5) On April 20, 2010, our former president and chief executive officer, Leslie Hudson, Ph.D., tendered his resignation at the request of our board of directors. Pursuant to his separation agreement, Dr. Hudson received total cash severance payments of \$1,412,170 (comprised of two times the sum of (i) his annual base salary in effect as of the separation date (\$494,400), (ii) the average of his last two annual bonuses (\$188,669), and (iii) the annual cost of Pfizer retiree healthcare coverage for him and his spouse (\$23,016)). The cash severance payments are paid to Dr. Hudson in 24 equal monthly installments, less required deductions and withholdings following the effective date of the separation agreement. In addition, as of the effective date of the separation agreement, unvested options to purchase 1,166,833 shares of our common stock and 116,500 shares of restricted stock previously granted to Dr. Hudson became fully vested and exercisable.
- (6) Upon termination of Dr. Johnson's employment by us without cause (as defined in Dr. Johnson's employment agreement) in connection with a change in control (as defined in Dr. Johnson's employment agreement) or upon Dr. Johnson's voluntary termination of employment in connection with a change in control, all unvested options shall immediately vest and be exercisable for a period of 180 days following the effective date of termination.
- (7) Upon termination of Mr. Medeiros's employment by us without cause (as defined in Mr. Medeiros's employment agreement) and other than in connection with or after a change in control (as defined in Mr. Medeiros's employment agreement) (i) we shall pay to Mr. Medeiros 12 months of his then current base compensation, with such payment to be made in a lump sum payment within 60 days of such termination of employment and (ii) all unvested equity awards and other long term compensation benefits then in effect shall immediately vest and be exercisable for a period of 180 days following the effective date of termination. Upon termination of Mr. Medeiros's employment by us without cause in connection with or after a change in control or upon Mr. Medeiros's voluntary termination of employment for good reason (as defined in Mr. Medeiros's employment agreement) in connection with or within 24 months after a change in control (i) we shall pay to Mr. Medeiros 24 months of his then current base compensation, with such payment to be made in a lump sum payment within 60 days of such termination of employment and (ii) all unvested equity awards and other long term compensation benefits then in effect shall immediately vest and be exercisable for a period of 180 days following the effective date of termination. The receipt of the benefits described herein is contingent upon Mr. Medeiros signing a form of separation and release agreement attached as an exhibit to his employment agreement.
- (8) Upon termination of Dr. Shrewsbury's employment by us without cause (as defined in Dr. Shrewsbury's employment agreement) and other than in connection with a change in control (as defined in Dr. Shrewsbury's employment agreement) (i) we shall pay to Dr. Shrewsbury 12 months of his then current base compensation and (ii) all unvested options shall immediately vest and be exercisable for a period of 180 days following the effective date of termination. Upon termination of Dr. Shrewsbury's employment by us without cause in connection with a change in control or upon Dr. Shrewsbury's voluntary termination of employment for good reason (as defined in Dr. Shrewsbury's employment agreement) in connection with a change in control (i) we shall pay to Dr. Shrewsbury 24 months of his then current base compensation and

(ii) all unvested options shall immediately vest and be exercisable for a period of 180 days following the effective date of termination. The receipt of the benefits described herein is contingent upon Dr. Shrewsbury signing a form of separation and release agreement attached as an exhibit to his employment agreement.

For a further discussion of our obligations on a change in control or termination of a named executive officer, see also the discussion above under "Post-Employment Benefits and Change in Control Arrangements."

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Approval of Related Party Transactions

Pursuant to the Code of Conduct, authorization from the audit committee is required for a director or officer to enter into a related party transaction or a similar transaction which could result in a conflict of interest. Conflicts of interest are prohibited unless specifically authorized in accordance with the Code of Conduct. We are not aware of any related party transactions during the last fiscal year that would require disclosure.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors and executive officers, and persons who own more than 10% of a registered class of our equity securities, to file reports of ownership of, and transactions in, our securities with the Securities and Exchange Commission and NASDAQ. Such directors, executive officers, and 10% shareholders are also required to furnish us with copies of all Section 16(a) forms that they file.

Based solely on a review of the copies of such forms received by us, or written representations from certain reporting persons, we believe that during 2010, our directors, executive officers, and 10% shareholders complied with all Section 16(a) filing requirements applicable to them.

Compensation Committee Interlocks and Insider Participation

During 2010, Christopher Garabedian, M. Kathleen Behrens, John Hodgman, Michael Casey, K. Michael Forrest and William Goolsbee served on our compensation committee. In December 2010, in connection with Christopher Garabedian's acceptance of an offer to serve as our President and Chief Executive Officer, the board of directors appointed William Goolsbee to replace Mr. Garabedian as the chairman and member of the compensation committee. From March 2007 to February 2008, Mr. Forrest served as our Interim Chief Executive Officer. With the exception of Mr. Forrest, during 2010, no member of our compensation committee was an officer or employee or formerly an officer of our company, and no member had any relationship that would require disclosure under Item 404 of Regulation S-K of the Securities Exchange Act of 1934. None of our executive officers has served on the board of directors or the compensation committee (or other board committee performing equivalent functions) of any other entity, one of whose executive officers served on our board of directors or on our compensation committee.

ANNUAL REPORT

A copy of our combined Annual Report to shareholders and Annual Report on Form 10-K for the year ended December 31, 2010 will be mailed to the shareholders of record as of May 5, 2011 together with the mailing of this proxy statement. An additional copy may be obtained from our website, www.avibio.com, or will be furnished, without charge, to beneficial shareholders or shareholders of record upon request in writing to Investor Relations, AVI BioPharma, Inc., 3450 Monte Villa Parkway, Suite 101, Bothell, Washington 98021 or by telephone to (425) 354-5038. Copies of exhibits to the Annual Report on Form 10-K are available for a nominal fee.

OTHER MATTERS

We know of no other matters to be submitted for consideration by the shareholders at the annual meeting. If any other matters properly come before the annual meeting, it is the intention of the persons named in the enclosed proxy card to vote the shares they represent as the board of directors may recommend.

It is important that your shares be represented at the meeting, regardless of the number of shares which you hold. You are therefore urged to execute and return, at your earliest convenience, the accompanying proxy card in the postage-prepaid envelope enclosed. You may also submit your proxy over the Internet or by telephone. For specific instructions, please refer to the information provided with your proxy card.

By Order of the Board of Directors,

Effie Toshav

Senior Vice President, General Counsel and Secretary

Bothell, Washington May 20, 2011

AVI BIOPHARMA, INC. 2011 EQUITY INCENTIVE PLAN

(effective as of shareholder approval at the 2011 annual meeting of shareholders)

- 1. Purposes of the Plan. The purposes of this Plan are:
 - to attract and retain the best available personnel for positions of substantial responsibility,
 - to provide additional incentives to Employees, Directors and Consultants, and
 - to promote the success of the Company's business.

The Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units and Performance Shares.

- 2. Definitions. As used herein, the following definitions will apply:
 - (a) "Administrator" means the Board or any of its Committees as will be administering the Plan, in accordance with Section 4 of the Plan.
- (b) "Affiliate" means any corporation or any other entity (including, but not limited to, partnerships and joint ventures) controlling, controlled by, or under common control with the Company.
- (c) "Applicable Laws" means the requirements relating to the administration of equity-based awards under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan.
- (d) "Award" means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units or Performance Shares.
- (e) "Award Agreement" means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.
- (f) "Award Transfer Program" means any program instituted by the Administrator that would permit Participants the opportunity to transfer for value any outstanding Awards to a financial institution or other person or entity approved by the Administrator.
 - (g) "Board" means the Board of Directors of the Company.
 - (h) "Change in Control" means the occurrence of any of the following events:
- (i) <u>Change in Ownership of the Company</u>. A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("<u>Person</u>"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than fifty percent (50%) of the total voting power of the stock of the Company; provided, however, that for purposes of this subsection (i), the acquisition of additional stock by any one Person, who is considered to own more than fifty percent (50%) of the total voting power of the stock of the Company will not be considered a Change in Control; or
- (ii) Change in Effective Control of the Company. If the Company has a class of securities registered pursuant to Section 12 of the Exchange Act, a change in the effective control of the Company which

occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this subsection (ii), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(iii) Change in Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than fifty percent (50%) of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (iii), the following will not constitute a change in the ownership of a substantial portion of the Company's assets: (A) a transfer to an entity that is controlled by the Company's shareholders immediately after the transfer, or (B) a transfer of assets by the Company to: (1) a shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's stock, (2) an entity, fifty percent (50%) or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (3) a Person, that owns, directly or indirectly, fifty percent (50%) or more of the total value or voting power of all the outstanding stock of the Company, or (4) an entity, at least fifty percent (50%) of the total value or voting power of which is owned, directly or indirectly, by a Person described in this subsection (iii)(B)(3). For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this definition, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

Notwithstanding the foregoing, a transaction shall not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Section 409A of the Code, as it has been and may be amended from time to time, and any proposed or final Treasury Regulations and Internal Revenue Service guidance that has been promulgated or may be promulgated thereunder from time to time.

Further and for the avoidance of doubt, a transaction shall not constitute a Change in Control if: (i) its sole purpose is to change the state of the Company's incorporation, or (ii) its sole purpose is to create a holding company that shall be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

- (i) "Code" means the Internal Revenue Code of 1986, as amended. Reference to a specific section of the Code or Treasury Regulation thereunder will include such section or regulation, any valid regulation or other official applicable guidance promulgated under such section, and any comparable provision of any future legislation or regulation amending, supplementing or superseding such section or regulation.
- (j) "Committee" means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board in accordance with Section 4 hereof.
 - (k) "Common Stock" means the common stock of the Company.
 - (1) "Company" means AVI BioPharma, Inc., an Oregon corporation, or any successor thereto.
- (m) "Consultant" means any person, including an advisor, engaged by the Company or a Parent or a Subsidiary to render services to such entity other than as an Employee.

- (n) "<u>Determination Date</u>" means the latest possible date that will not jeopardize the qualification of an Award granted under the Plan as "performance-based compensation" under Section 162(m) of the Code.
 - (o) "Director" means a member of the Board.
- (p) "Disability" means total and permanent disability as defined in Section 22(e)(3) of the Code, provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time.
- (q) "Employee" means any person, including Officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. Neither service as a Director nor payment of a director's fee by the Company will be sufficient to constitute "employment" by the Company.
 - (r) "Exchange Act" means the Securities Exchange Act of 1934, as amended.
- (s) "Exchange Program" means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for Awards of the same type (which may have higher or lower exercise prices and different terms), Awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer for value any outstanding Awards to a financial institution or other person or entity selected by the Administrator, and/or (iii) the exercise price of an outstanding Award is reduced or increased. The Administrator will determine the terms and conditions of any Exchange Program in its sole discretion.
 - (t) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:
- (i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq Global Market, the Nasdaq Global Select Market or the Nasdaq Capital Market, its Fair Market Value shall be the closing sales price for such stock (or, if no closing sales price was reported on that date, as applicable, on the last trading date such closing sales price is reported) as quoted on such exchange or system on the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;
- (ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value shall be the mean between the high bid and low asked prices for the Common Stock on the day of determination (or, if no bids and asks were reported on that date, as applicable, on the last trading date such bids and asks are reported); or
- (iii) In the absence of an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.
- (u) "Family Member" means any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law (including adoptive relationships) of the Employee, any person sharing the Employee's household (other than a tenant or employee), a trust in which these persons (or the Employee) have more than 50% of the beneficial interest, a foundation in which these persons (or the Employee) control the management of assets, and any other entity in which these persons (or the Employee) own more than 50% of the voting interests.
 - (v) "Fiscal Year" means the fiscal year of the Company.
- (w) "Incentive Stock Option" means an Option that by its terms qualifies and is otherwise intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

- (x) "Inside Director" means a Director who is an Employee.
- (y) "Nonstatutory Stock Option" means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.
- (z) "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.
 - (aa) "Option" means a stock option granted pursuant to the Plan.
 - (bb) "Outside Director" means a Director who is not an Employee.
 - (cc) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.
 - (dd) "Participant" means the holder of an outstanding Award.
 - (ee) "Performance Goals" will have the meaning set forth in Section 11 of the Plan.
 - (ff) "Performance Period" means any Fiscal Year of the Company or such other period as determined by the Administrator in its sole discretion.
- (gg) "Performance Share" means an Award denominated in Shares which may be earned in whole or in part upon attainment of performance goals or other vesting criteria as the Administrator may determine pursuant to Section 10.
- (hh) "Performance Unit" means an Award which may be earned in whole or in part upon attainment of performance goals or other vesting criteria as the Administrator may determine and which may be settled for cash, Shares or other securities or a combination of the foregoing pursuant to Section 10.
- (ii) "Period of Restriction" means the period during which the transfer of Shares of Restricted Stock are subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.
 - (jj) "Plan" means this 2011 Equity Incentive Plan.
- (kk) "Restricted Stock" means Shares issued pursuant to a Restricted Stock award under Section 8 of the Plan, or issued pursuant to the early exercise of an Option.
- (II) "Restricted Stock Unit" means a bookkeeping entry representing an amount equal to the Fair Market Value of one Share, granted pursuant to Section 9. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.
- (mm) "Rule 16b-3" means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.
 - (nn) "Service Provider" means an Employee, Director or Consultant.
 - (00) "Share" means a share of the Common Stock, as adjusted in accordance with Section 15(a) of the Plan.

- (pp) "Stock Appreciation Right" means an Award, granted alone or in connection with an Option, that pursuant to Section 7 is designated as a Stock Appreciation Right.
 - (qq) "Subsidiary" means a "subsidiary corporation", whether now or hereafter existing, as defined in Section 424(f) of the Code.

3. Stock Subject to the Plan.

- (a) Stock Subject to the Plan. Subject to the provisions of Section 15(a) of the Plan, the maximum aggregate number of Shares that may be subject to Awards and sold under the Plan is 13,000,000 Shares, plus (i) any Shares which have been reserved but not issued pursuant to any awards granted under the Company's 2002 Equity Incentive Plan (the "2002 Plan") as of the date of shareholder approval of this Plan (up to a maximum of 2,072,457 Shares), and (ii) any Shares subject to stock options or similar awards granted under 2002 Plan that expire or otherwise terminate without having been exercised in full and Shares issued pursuant to awards granted under the 2002 Plan that are forfeited to or repurchased by the Company (up to a maximum of 11,086,073 Shares). The Shares may be authorized, but unissued, or reacquired Common Stock.
- (b) Lapsing Awards. If an Award expires or becomes unexercisable without having been exercised in full, is surrendered pursuant to an Exchange Program, or, with respect to Restricted Stock, Restricted Stock Units, Performance Units or Performance Shares, is forfeited to or repurchased by the Company due to failure to vest, the unpurchased Shares (or for Awards other than Options or Stock Appreciation Rights the forfeited or repurchased Shares) which were subject thereto will become available for future grant or sale under the Plan (unless the Plan has terminated). With respect to Stock Appreciation Rights, all Shares subject to a Stock Appreciation Right will cease to be available under the Plan, other than Shares forfeited due to failure to vest which will become available for future grant or sale under the Plan (unless the Plan has terminated). Shares that have actually been issued under the Plan under any Award will not be returned to the Plan and will not become available for future distribution under the Plan; provided, however, that if Shares issued pursuant to Awards of Restricted Stock, Restricted Stock Units, Performance Shares or Performance Units are repurchased by the Company or are forfeited to the Company due to failure to vest, such Shares will become available for future grant under the Plan. Shares used to pay the exercise or purchase price of an Award and/or to satisfy the tax withholding obligations related to an Award will become available for future grant or sale under the Plan. To the extent an Award under the Plan is paid out in cash rather than Shares, such cash payment will not result in reducing the number of Shares available for issuance under the Plan. Notwithstanding the foregoing and, subject to adjustment as provided in Section 15(a), the maximum number of Shares that may be issued upon the exercise of Incentive Stock Options will equal the aggregate Share number stated in Section 3(a), plus, to the extent allowable under Section 3(b).
- (c) <u>Share Reserve</u>. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

4. Administration of the Plan.

- (a) Procedure.
 - (i) Multiple Administrative Bodies. Different Committees with respect to different groups of Service Providers may administer the Plan.
- (ii) <u>Section 162(m)</u>. To the extent that the Administrator determines it to be desirable to qualify Awards granted hereunder as "performance-based compensation" within the meaning of Section 162(m) of the Code, the Plan will be administered by a Committee of two (2) or more "outside directors" within the meaning of Section 162(m) of the Code.

- (iii) Rule 16b-3. To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder will be structured to satisfy the requirements for exemption under Rule 16b-3.
- (iv) Other Administration. Other than as provided above, the Plan will be administered by (A) the Board or (B) a Committee, which committee will be constituted to satisfy Applicable Laws.
- (b) <u>Powers of the Administrator</u>. Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator will have the authority, in its discretion:
 - (i) to determine the Fair Market Value;
 - (ii) to select the Service Providers to whom Awards may be granted hereunder;
 - (iii) to determine the number of Shares to be covered by each Award granted hereunder;
 - (iv) to approve forms of Award Agreements for use under the Plan;
- (v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator will determine;
 - (vi) to determine the terms and conditions of any, and to institute any Exchange Program, subject to Section 4(e);
 - (vii) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;
- (viii) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws or for qualifying for favorable tax treatment under applicable foreign laws;
- (ix) to modify or amend each Award (subject to Section(s) 4(e)(i) and 20(c) of the Plan), including but not limited to the discretionary authority to extend the post-termination exercisability period of Awards and to extend the maximum term of an Option (subject to Section 6(b) regarding Incentive Stock Options);
 - (x) to allow Participants to satisfy withholding tax obligations in such manner as prescribed in Section 16;
- (xi) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;
- (xii) to allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that would otherwise be due to such Participant under an Award pursuant to such procedures as the Administrator may determine; and
 - (xiii) to make all other determinations deemed necessary or advisable for administering the Plan.
- (c) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards.

(d) No Liability. Under no circumstances shall the Company, its Affiliates, the Administrator, or the Board incur liability for any indirect, incidental, consequential or special damages (including lost profits) of any form incurred by any person, whether or not foreseeable and regardless of the form of the act in which such a claim may be brought, with respect to the Plan or the Company's, its Affiliates', the Administrator's or the Board's roles in connection with the Plan.

(e) Limitations.

- (i) <u>Prohibition Against Repricing</u>. Notwithstanding Section 4(b)(ix), the Administrator may not modify or amend an Option or Stock Appreciation Right to reduce the exercise price of such Option or Stock Appreciation Right after it has been granted (except for adjustments made pursuant to Section 15), and neither may the Administrator cancel any outstanding Option or Stock Appreciation Right and immediately replace it with any other Award with a lower exercise price, unless such action is approved by shareholders prior to such action being taken.
- (ii) <u>Buyout Provisions</u>. The Administrator may at any time offer to buy out for a payment in cash an Option previously granted based on such terms and conditions as the Administrator will establish and communicate to the Participant at the time that such offer is made. Notwithstanding anything contained in this Section 4(e)(ii) to the contrary, the Administrator shall not be allowed to authorize the buyout of underwater Options or Stock Appreciation Rights without the prior consent of the Company's shareholders.
- 5. <u>Eligibility</u>. Nonstatutory Stock Options, Restricted Stock, Restricted Stock Units, Stock Appreciation Rights, Performance Units, and Performance Shares may be granted to Service Providers. Incentive Stock Options may be granted only to employees of the Company or any Parent or Subsidiary of the Company.

6. Stock Options.

(a) Limitations.

- (i) Each Option will be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Participant during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds one hundred thousand U.S. dollars (\$100,000), such Options will be treated as Nonstatutory Stock Options. For purposes of this Section 6(a), Incentive Stock Options will be taken into account in the order in which they were granted. The Fair Market Value of the Shares will be determined as of the time the Option with respect to such Shares is granted.
- (ii) The Administrator will have complete discretion to determine the number of Shares subject to an Option granted to any Participant, provided that during any Fiscal Year, no Participant will be granted an Option covering more than 1,000,000 Shares. Notwithstanding the limitation in the previous sentence, in connection with his or her initial service as an Employee, an Employee may be granted Options covering up to an additional 1,000,000 Shares. The foregoing limitations will be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 15(a).
- (b) <u>Term of Option</u>. The term of each Option will be stated in the Award Agreement; provided, however, that the term will be no more than ten (10) years from the date of grant thereof. In the case of an Incentive Stock Option granted to a Participant who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option will be five (5) years from the date of grant or such shorter term as may be provided in the Award Agreement.

(c) Option Exercise Price and Consideration.

- (i) The per Share exercise price for the Shares to be issued pursuant to the exercise of an Option will be determined by the Administrator, but will be no less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant. In addition, in the case of an Incentive Stock Option granted to an employee of the Company or any Parent or Subsidiary of the Company who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price will be no less than one hundred ten percent (110%) of the Fair Market Value per Share on the date of grant. Notwithstanding the foregoing provisions of this Section 6(c)(i), Options may be granted with a per Share exercise price of less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Code Section 424(a).
- (ii) <u>Waiting Period and Exercise Dates</u>. At the time an Option is granted, the Administrator will fix the period within which the Option may be exercised and will determine any conditions that must be satisfied before the Option may be exercised.
- (iii) Form of Consideration. The Administrator will determine the acceptable form(s) of consideration for exercising an Option, including the method of payment, to the extent permitted by Applicable Laws. In the case of an Incentive Stock Option, the Administrator will determine the acceptable form of consideration at the time of grant. Such consideration to the extent permitted by Applicable Laws may include, but is not limited to:
 - (1) cash;
 - (2) check;
- (3) other Shares which have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option will be exercised and provided that accepting such Shares, in the sole discretion of the Administrator, will not result in any adverse accounting consequences to the Company;
 - (4) by net exercise;
- (5) consideration received by the Company under a cashless exercise program implemented by the Company in connection with the Plan;
- (6) a reduction in the amount of any Company liability to the Participant, including any liability attributable to the Participant's participation in any Company-sponsored deferred compensation program or arrangement;
 - (7) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws; or
 - (8) any combination of the foregoing methods of payment.

(d) Exercise of Option.

(i) <u>Procedure for Exercise; Rights as a Shareholder</u>. Any Option granted hereunder will be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. An Option may not be exercised for a fraction of a Share.

An Option will be deemed exercised when the Company receives: (i) notice of exercise (in such form as the Administrator specifies from time to time) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised (together with applicable tax withholdings). Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan. Shares issued upon exercise of an Option will be issued in the name of the Participant or, if requested by the Participant, in the name of the Participant and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a shareholder will exist with respect to the Shares subject to an Option, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 15(a) of the Plan.

Exercising an Option in any manner will decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

- (ii) <u>Termination of Relationship as a Service Provider</u>. If a Participant ceases to be a Service Provider, other than upon the Participant's termination as the result of the Participant's death or Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent that the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for three (3) months following the Participant's termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified by the Administrator, the Option will terminate, and the Shares covered by such Option will revert to the Plan.
- (iii) <u>Disability of Participant</u>. If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for twelve (12) months following the Participant's termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.
- (iv) <u>Death of Participant</u>. If a Participant dies while a Service Provider, the Option may be exercised following the Participant's death within such period of time as is specified in the Award Agreement to the extent that the Option is vested on the date of death (but in no event may the Option be exercised later than the expiration of the term of such Option as set forth in the Award Agreement), by the Participant's designated beneficiary, provided such beneficiary has been designated prior to Participant's death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. In the absence of a specified time in the Award Agreement, the Option will remain exercisable for twelve (12) months following Participant's death. Unless otherwise provided by the Administrator, if at the time of death Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will immediately revert to the Plan. If the Option is not so exercised within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(v) Other Termination. A Participant's Award Agreement also may provide that if the exercise of the Option following the termination of Participant's status as a Service Provider (other than upon the Participant's death or Disability) would result in liability under Section 16(b) of the Exchange Act, then the Option will terminate on the earlier of (A) the expiration of the term of the Option set forth in the Award Agreement, or (B) the tenth (10th) day after the last date on which such exercise would result in such liability under Section 16(b) of the Exchange Act. Finally, a Participant's Award Agreement may also provide that if the exercise of the Option following the termination of the Participant's status as a Service Provider (other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of Shares would violate the registration requirements under the Securities Act, then the Option will terminate on the earlier of (A) the expiration of the term of the Option, or (B) the expiration of a period of three (3) months after the termination of the Participant's status as a Service Provider during which the exercise of the Option would not be in violation of such registration requirements.

7. Stock Appreciation Rights.

- (a) <u>Grant of Stock Appreciation Rights</u>. Subject to the terms and conditions of the Plan, a Stock Appreciation Right may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion.
- (b) Number of Shares. The Administrator will have complete discretion to determine the number of Stock Appreciation Rights granted to any Participant, provided that during any Fiscal Year, no Participant will be granted Stock Appreciation Rights covering more than 1,000,000 Shares. Notwithstanding the limitation in the previous sentence, in connection with his or her initial service as an Employee, an Employee may be granted Stock Appreciation Rights covering up to an additional 1,000,000 Shares. The foregoing limitations will be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 15(a).
- (c) Exercise Price and Other Terms. The Administrator, subject to the provisions of the Plan, will have complete discretion to determine the terms and conditions of Stock Appreciation Rights granted under the Plan, provided, however, that the exercise price will not be less than one hundred percent (100%) of the Fair Market Value of a Share on the date of grant. Notwithstanding the foregoing provisions of this Section 7(c), Stock Appreciation Rights may be granted with a per Share exercise price of less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code and the Treasury Regulations thereunder.
- (d) Stock Appreciation Right Agreement. Each Stock Appreciation Right grant will be evidenced by an Award Agreement that will specify the exercise price, the term of the Stock Appreciation Right, the acceptable forms of consideration for exercise (which may include any form of consideration permitted by Section 6(c)(iii), the conditions of exercise, and such other terms and conditions as the Administrator, in its sole discretion, will determine.
- (e) Expiration of Stock Appreciation Rights. A Stock Appreciation Right granted under the Plan will expire upon the date determined by the Administrator, in its sole discretion, and set forth in the Award Agreement; provided, however, that the term will be no more than ten (10) years from the date of grant thereof. Notwithstanding the foregoing, the rules of Section 6(d) relating to exercise also will apply to Stock Appreciation Rights.
- (f) Payment of Stock Appreciation Right Amount. Upon exercise of a Stock Appreciation Right, a Participant will be entitled to receive payment from the Company in an amount determined by multiplying:
 - (i) The difference between the Fair Market Value of a Share on the date of exercise over the exercise price; times

(ii) The number of Shares with respect to which the Stock Appreciation Right is exercised.

At the discretion of the Administrator, the payment upon Stock Appreciation Right exercise may be in cash, in Shares of equivalent value, or in some combination thereof.

8. Restricted Stock.

- (a) <u>Grant of Restricted Stock</u>. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator, in its sole discretion, will determine.
- (b) Restricted Stock Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify the Period of Restriction, the number of Shares granted, and such other terms and conditions as the Administrator, in its sole discretion, will determine. Unless the Administrator determines otherwise, the Company as escrow agent will hold Shares of Restricted Stock until the restrictions on such Shares have lapsed. Notwithstanding the foregoing sentence, for restricted stock intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code, during any Fiscal Year no Participant will receive more than an aggregate of 500,000 Shares of Restricted Stock. Notwithstanding the foregoing limitation, in connection with his or her initial service as an Employee, for restricted stock intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code, an Employee may be granted an aggregate of up to an additional 500,000 Shares of Restricted Stock. The foregoing limitations will be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 15(a).
- (c) <u>Transferability</u>. Except as provided in this Section 8, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable Period of Restriction.
- (d) Other Restrictions. The Administrator, in its sole discretion, may impose such other restrictions on Shares of Restricted Stock as it may deem advisable or appropriate.
- (e) <u>Removal of Restrictions</u>. Except as otherwise provided in this Section 8, Shares of Restricted Stock covered by each Restricted Stock grant made under the Plan will be released from escrow as soon as practicable after the last day of the Period of Restriction or at such other time as the Administrator may determine. The Administrator, in its sole discretion, may reduce or waive any restrictions for such Award and may accelerate the time at which any restrictions will lapse or be removed.
- (f) <u>Voting Rights</u>. During the Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.
- (g) <u>Dividends and Other Distributions</u>. During the Period of Restriction, Service Providers holding Shares of Restricted Stock will be entitled to receive all dividends and other distributions paid with respect to such Shares, unless the Administrator provides otherwise. If any such dividends or distributions are paid in Shares, the Shares will be subject to the same restrictions on transferability and forfeitability as the Shares of Restricted Stock with respect to which they were paid.
- (h) Return of Restricted Stock to Company. On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.
- (i) <u>Section 162(m) Performance Restrictions</u>. For purposes of qualifying grants of Restricted Stock as "performance-based compensation" under Section 162(m) of the Code, the Administrator, in its discretion, may

set restrictions based upon the achievement of Performance Goals. The Performance Goals will be set by the Administrator on or before the Determination Date. In granting Restricted Stock which is intended to qualify under Section 162(m) of the Code, the Administrator will follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Award under Section 162(m) of the Code (e.g., in determining the Performance Goals).

9. Restricted Stock Units.

- (a) <u>Grant</u>. Restricted Stock Units may be granted at any time and from time to time as determined by the Administrator. After the Administrator determines that it will grant Restricted Stock Units under the Plan, it will advise the Participant in an Award Agreement of the terms, conditions, and restrictions related to the grant, including the number of Restricted Stock Units. Notwithstanding anything to the contrary in this subsection (a), for Restricted Stock Units intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code, during any Fiscal Year of the Company, no Participant will receive more than an aggregate of 500,000 Restricted Stock Units. Notwithstanding the limitation in the previous sentence, for Restricted Stock Units intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code, in connection with his or her initial service as an Employee, an Employee may be granted an aggregate of up to an additional 500,000 Restricted Stock Units. The foregoing limitations will be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 15(a).
- (b) <u>Vesting Criteria and Other Terms</u>. The Administrator will set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will be paid out to the Participant. The Administrator may set vesting criteria based upon the achievement of Company-wide, business unit, or individual goals (including, but not limited to, continued employment), or any other basis determined by the Administrator in its discretion.
- (c) <u>Earning Restricted Stock Units</u>. Upon meeting the applicable vesting criteria, the Participant will be entitled to receive a payout as determined by the Administrator. Notwithstanding the foregoing, at any time after the grant of Restricted Stock Units, the Administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout and may accelerate the time at which any restrictions will lapse or be removed.
- (d) Form and Timing of Payment. Payment of earned Restricted Stock Units will be made as soon as practicable after the date(s) set forth in the Award Agreement or as otherwise provided in the applicable Award Agreement or as required by Applicable Laws. The Administrator, in its sole discretion, may pay earned Restricted Stock Units in cash, Shares, or a combination thereof. Shares represented by Restricted Stock Units that are fully paid in cash again will not reduce the number of Shares available for grant under the Plan.
 - (e) Cancellation. On the date set forth in the Award Agreement, all unearned Restricted Stock Units will be forfeited to the Company.
- (f) Section 162(m) Performance Restrictions. For purposes of qualifying grants of Restricted Stock Units as "performance-based compensation" under Section 162(m) of the Code, the Administrator, in its discretion, may set restrictions based upon the achievement of Performance Goals. The Performance Goals will be set by the Administrator on or before the Determination Date. In granting Restricted Stock Units which are intended to qualify under Section 162(m) of the Code, the Administrator will follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Award under Section 162(m) of the Code (e.g., in determining the Performance Goals).

10. Performance Units and Performance Shares.

(a) <u>Grant of Performance Units/Shares</u>. Performance Units and Performance Shares may be granted to Service Providers at any time and from time to time, as will be determined by the Administrator, in its sole

discretion. The Administrator will have complete discretion in determining the number of Performance Units and Performance Shares granted to each Participant provided that during any Fiscal Year, for Performance Units or Performance Shares intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code, (i) no Participant will receive Performance Units having an initial value greater than \$1,700,000, and (ii) no Participant will receive more than 500,000 Performance Shares. Notwithstanding the foregoing limitation, for Performance Shares intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code, in connection with his or her initial service, a Service Provider may be granted up to an additional 500,000 Performance Shares and additional Performance Units having an initial value up to \$1,700,000. The foregoing limitations will be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 15(a).

- (b) <u>Value of Performance Units/Shares</u>. Each Performance Unit will have an initial value that is established by the Administrator on or before the date of grant. Each Performance Share will have an initial value equal to the Fair Market Value of a Share on the date of grant.
- (c) <u>Performance Objectives and Other Terms</u>. The Administrator will set performance objectives or other vesting provisions (including, without limitation, continued status as a Service Provider) in its discretion which, depending on the extent to which they are met, will determine the number or value of Performance Units/Shares that will be paid out to the Service Providers. The time period during which the performance objectives or other vesting provisions must be met will be called the "Performance Period." Each Award of Performance Units/Shares will be evidenced by an Award Agreement that will specify the Performance Period, and such other terms and conditions as the Administrator, in its sole discretion, will determine. The Administrator may set performance objectives based upon the achievement of Company-wide, divisional, or individual goals, applicable federal or state securities laws, or any other basis determined by the Administrator in its discretion.
- (d) <u>Earning of Performance Units/Shares</u>. After the applicable Performance Period has ended, the holder of Performance Units/Shares will be entitled to receive a payout of the number of Performance Units/Shares earned by the Participant over the Performance Period, to be determined as a function of the extent to which the corresponding performance objectives or other vesting provisions have been achieved. After the grant of a Performance Unit/Share, the Administrator, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such Performance Unit/Share and may accelerate the time at which any restrictions will lapse or be removed.
- (e) Form and Timing of Payment of Performance Units/Shares. Payment of earned Performance Units/Shares will be made as soon as practicable after the expiration of the applicable Performance Period, or as otherwise provided in the applicable Award Agreement or as required by Applicable Laws. The Administrator, in its sole discretion, may pay earned Performance Units/Shares in the form of cash, in Shares (which have an aggregate Fair Market Value equal to the value of the earned Performance Units/Shares at the close of the applicable Performance Period) or in a combination thereof.
- (f) <u>Cancellation of Performance Units/Shares</u>. On the date set forth in the Award Agreement, all unearned or unvested Performance Units/Shares will be forfeited to the Company, and again will be available for grant under the Plan.
- (g) Section 162(m) Performance Restrictions. For purposes of qualifying grants of Performance Units/Shares as "performance-based compensation" under Section 162(m) of the Code, the Administrator, in its discretion, may set restrictions based upon the achievement of Performance Goals. The Performance Goals will be set by the Administrator on or before the Determination Date. In granting Performance Units/Shares which are intended to qualify under Section 162(m) of the Code, the Administrator will follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Award under Section 162(m) of the Code (e.g., in determining the Performance Goals).

- 11. Performance-Based Compensation Under Code Section 162(m).
- (a) <u>General</u>. If the Administrator, in its discretion, decides to grant an Award intended to qualify as "performance-based compensation" under Section 162(m) of the Code, the provisions of this Section 11 will control over any contrary provision in the Plan; provided, however, that the Administrator may in its discretion grant Awards that are not intended to qualify as "performance-based compensation" under Section 162(m) of the Code to such Participants that are based on Performance Goals or other specific criteria or goals but that do not satisfy the requirements of this Section 11.
- (b) Performance Goals. The granting and/or vesting of Awards of Restricted Stock, Restricted Stock Units, Performance Shares and Performance Units and other incentives under the Plan may be made subject to the attainment of performance goals relating to one or more business criteria within the meaning of Section 162(m) of the Code and may provide for a targeted level or levels of achievement ("Performance Goals") including: (i) attainment of research and development milestones, (ii) bookings, (iii) business divestitures and acquisitions, (iv) cash flow, (v) cash position, (vi) contract awards or backlog, (vii) customer renewals, (viii) customer retention rates from an acquired company, business unit or division, (ix) earnings (which may include earnings before interest and taxes, earnings before taxes and net earnings), (x) earnings per Share, (xi) expenses, (xii) gross margin, (xiii) growth in shareholder value relative to the moving average of the S&P 500 Index or another index, (xiv) internal rate of return, (xv) market share, (xvi) net income, (xvii) net profit, (xviii) net sales, (xix) new product development, (xx) new product invention or innovation, (xxi) number of customers, (xxii) operating cash flow, (xxiii) operating expenses, (xxiv) operating income, (xxv) operating margin, (xxvi) overhead or other expense reduction, (xxvii) product defect measures, (xxviii) product release timelines, (xxix) productivity, (xxx) profit, (xxxi) return on assets, (xxxii) return on capital, (xxxiii) return on equity, (xxxiv) return on investment, (xxxv) return on sales, (xxxvi) revenue, (xxxvii) revenue growth, (xxxviii) sales results, (xxxix) sales growth, (xl) stock price, (xli) time to market, (xlii) total shareholder return, (xliii) working capital. Any criteria used may be (A) measured in absolute terms, (B) measured in terms of growth, (C) compared to another company or companies, (D) measured against the market as a whole and/or according to applicable market indices, (E) measured against the performance of the Company as a whole or a segment of the Company and/or (F) measured on a pre-tax or post-tax basis (if applicable). Further, any Performance Goals may be used to measure the performance of the Company as a whole or a business unit or other segment of the Company, or one or more product lines or specific markets and may be measured relative to a peer group or index. The Performance Goals may differ from Participant to Participant and from Award to Award. Prior to the Determination Date, the Administrator will determine whether any significant element(s) will be included in or excluded from the calculation of any Performance Goal with respect to any Participant. In all other respects, Performance Goals will be calculated in accordance with the Company's financial statements, generally accepted accounting principles, or under a methodology established by the Administrator prior to the issuance of an Award and which is consistently applied with respect to a Performance Goal in the relevant Performance Period. The Administrator will appropriately adjust any evaluation of performance under a Performance Goal to exclude (1) any extraordinary non-recurring items as described in Accounting Principles Board Opinion No. 30 and/or in management's discussion and analysis of financial conditions and results of operations appearing in the Company's annual report to shareholders for the applicable year, or (2) the effect of any changes in accounting principles affecting the Company's or a business units' reported results. In addition, the Administrator will adjust any performance criteria, Performance Goal or other feature of an Award that relates to or is wholly or partially based on the number of, or the value of, any stock of the Company, to reflect any stock dividend or split, repurchase, recapitalization, combination, or exchange of shares or other similar changes in such stock.
- (c) <u>Procedures</u>. To the extent necessary to comply with the performance-based compensation provisions of Section 162(m) of the Code, with respect to any Award granted subject to Performance Goals and intended to qualify as "performance-based compensation" under Section 162(m) of the Code, within the first twenty-five percent (25%) of the Performance Period, but in no event more than ninety (90) days following the commencement of any Performance Period (or such other time as may be required or permitted by

Section 162(m) of the Code), the Administrator will, in writing, (i) designate one or more Participants to whom an Award will be made, (ii) select the Performance Goals applicable to the Performance Period, (iii) establish the Performance Goals, and amounts of such Awards, as applicable, which may be earned for such Performance Period, and (iv) specify the relationship between Performance Goals and the amounts of such Awards, as applicable, to be earned by each Participant for such Performance Period. Following the completion of each Performance Period, the Administrator will certify in writing whether the applicable Performance Goals have been achieved for such Performance Period. In determining the amounts earned by a Participant, the Administrator will have the right to reduce or eliminate (but not to increase) the amount payable at a given level of performance to take into account additional factors that the Administrator may deem relevant to the assessment of individual or corporate performance for the Performance Period. A Participant will be eligible to receive payment pursuant to an Award intended to qualify as "performance-based compensation" under Section 162(m) of the Code for a Performance Period only if the Performance Goals for such period are achieved.

- (d) Additional Limitations. Notwithstanding any other provision of the Plan, any Award which is granted to a Participant and is intended to constitute qualified performance-based compensation under Section 162(m) of the Code will be subject to any additional limitations set forth in the Code (including any amendment to Section 162(m)) or any regulations and ruling issued thereunder that are requirements for qualification as qualified performance-based compensation as described in Section 162(m) of the Code, and the Plan will be deemed amended to the extent necessary to conform to such requirements.
- (e) <u>Determination of Amounts Earned.</u> In determining the amounts earned by a Participant pursuant to an Award intended to qualified as "performance-based compensation" under Section 162(m) of the Code, the Committee will have the right to (a) reduce or eliminate (but not to increase) the amount payable at a given level of performance to take into account additional factors that the Committee may deem relevant to the assessment of individual or corporate performance for the Performance Period, (b) determine what actual Award, if any, will be paid in the event of a termination of employment as the result of a Participant's death or disability or upon a Change in Control or in the event of a termination of employment following a Change in Control prior to the end of the Performance Period, and (c) determine what actual Award, if any, will be paid in the event of a termination of employment other than as the result of a Participant's death or disability prior to a Change of Control and prior to the end of the Performance Period to the extent an actual Award would have otherwise been achieved had the Participant remained employed through the end of the Performance Period. A Participant will be eligible to receive payment pursuant to an Award intended to qualify as "performance-based compensation" under Section 162(m) of the Code for a Performance Period only if the Performance Goals for such period are achieved.
- 12. Compliance With Code Section 409A. Awards will be designed and operated in such a manner that they are either exempt from the application of, or comply with, the requirements of Code Section 409A such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Code Section 409A, except as otherwise determined in the sole discretion of the Administrator. The Plan and each Award Agreement under the Plan is intended to meet the requirements of Code Section 409A and will be construed and interpreted in accordance with such intent, except as otherwise determined in the sole discretion of the Administrator. To the extent that an Award or payment, or the settlement or deferral thereof, is subject to Code Section 409A the Award will be granted, paid, settled or deferred in a manner that will meet the requirements of Code Section 409A, such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Code Section 409A.
- 13. <u>Leaves of Absence/Transfer Between Locations</u>. Unless the Administrator provides otherwise and except as required by Applicable Laws, vesting of Awards granted hereunder will be suspended during any unpaid leave of absence. A Participant will not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, or any Subsidiary. For purposes of Incentive Stock Options, no such leave may exceed three (3) months, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then six (6) months following

the first (1st) day of such leave, any Incentive Stock Option held by the Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.

14. Transferability of Awards.

- (a) Non-Transferability of Awards. Unless determined otherwise by the Administrator, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, including, without limitation, by instrument to an inter vivos or testamentary trust in which the Awards are to be passed to beneficiaries upon the death of the trustor (settlor) or by gift to Family Members, such Award will contain such additional terms and conditions as the Administrator deems appropriate.
- (b) <u>Prohibition Against an Award Transfer Program</u>. Notwithstanding anything to the contrary in the Plan, in no event will the Administrator have the right to determine and implement the terms and conditions of any Award Transfer Program without shareholder approval.

15. Adjustments; Dissolution or Liquidation; Merger or Change in Control.

- (a) Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, will adjust the number and class of Shares that may be delivered under the Plan and/or the number, class, and price of Shares covered by each outstanding Award, and the numerical Share limits set forth in Sections 3, 6, 7, 8, 9 and 10 of the Plan.
- (b) <u>Dissolution or Liquidation</u>. In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.
- (c) Change in Control. In the event of a merger or Change in Control, each outstanding Award will be treated as the Administrator determines without a Participant's consent, including, without limitation, that (i) Awards will be assumed, or substantially equivalent Awards will be substituted, by the acquiring or succeeding corporation (or an affiliate thereof) with appropriate adjustments as to the number and kind of shares and prices; (ii) upon written notice to a Participant, that the Participant's Awards will terminate upon or immediately prior to the consummation of such merger or Change in Control; (iii) outstanding Awards will vest and become exercisable, realizable, or payable, or restrictions applicable to an Award will lapse, in whole or in part prior to or upon consummation of such merger or Change in Control, and, to the extent the Administrator determines, terminate upon or immediately prior to the effectiveness of such merger of Change in Control; (iv) (A) the termination of an Award in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon the exercise of such Award or realization of the Participant's rights as of the date of the occurrence of the transaction (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction the Administrator determines in good faith that no amount would have been attained upon the exercise of such Award or realization of the Participant's rights, then such Award may be terminated by the Company without payment), or (B) the replacement of such Award with other rights or property selected by the Administrator in its sole discretion; or (v) any combination of the foregoing. In taking any of the actions permitted under this subsection (c), the Administrator will not be obligated to treat all Awards, all Awards held by a Participant, or all Awards of the same type, similarly.

In the event that the successor corporation does not assume or substitute for the Award (or portion thereof), the Participant will fully vest in and have the right to exercise all of his or her outstanding Options and

Stock Appreciation Rights that are not assumed or substituted for, including Shares as to which such Awards would not otherwise be vested or exercisable, all restrictions on Restricted Stock, Restricted Stock Units, and Performance Shares/Units not assumed or substituted for will lapse, and, with respect to Awards with performance-based vesting not assumed or substituted for, all performance goals or other vesting criteria will be deemed achieved at one hundred percent (100%) of target levels and all other terms and conditions met. In addition, if an Option or Stock Appreciation Right is not assumed or substituted for in the event of a Change in Control, the Administrator will notify the Participant in writing or electronically that the Option or Stock Appreciation Right will be fully vested and exercisable for a period of time determined by the Administrator in its sole discretion, and the Option or Stock Appreciation Right will terminate upon the expiration of such period.

For the purposes of this subsection (c), an Award will be considered assumed if, following the Change in Control, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the Change in Control, the consideration (whether stock, cash, or other securities or property) or, in the case of a Stock Appreciation Right upon the exercise of which the Administrator determines to pay cash or a Restricted Stock Unit, Performance Share or Performance Unit which the Administrator can determine to pay in cash, the fair market value of the consideration received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the Change in Control is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of an Option or Stock Appreciation Right or upon the payout of a Restricted Stock Unit, Performance Unit or Performance Share, for each Share subject to such Award (or in the case of an Award settled in cash, the number of implied shares determined by dividing the value of the Award by the per share consideration received by holders of Common Stock in the Change in Control), to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the Change in Control.

Notwithstanding anything in this subsection (c) to the contrary, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the Company or its successor modifies any of such performance goals without the Participant's consent; provided, however, a modification to such performance goals only to reflect the successor corporation's post-Change in Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

Notwithstanding anything in this subsection (c) to the contrary, if a payment under an Award Agreement is subject to Section 409A of the Code and if the change in control definition contained in the Award Agreement or other agreement related to the Award does not comply with the definition of "change in control" for purposes of a distribution under Section 409A of the Code, then any payment of an amount that is otherwise accelerated under this Section will be delayed until the earliest time that such payment would be permissible under Section 409A of the Code without triggering any penalties applicable under Section 409A of the Code.

16. Tax Withholding.

- (a) <u>Withholding Requirements</u>. Prior to the delivery of any Shares or cash pursuant to an Award (or exercise thereof), the Company will have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy federal, state, local, foreign or other taxes (including the Participant's FICA obligation) required to be withheld with respect to such Award (or exercise thereof).
- (b) Withholding Arrangements. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such tax withholding obligation, in whole or in part by (without limitation) (a) paying cash, (b) electing to have the Company withhold otherwise deliverable cash or Shares having a Fair Market Value equal to the statutory amount required to be withheld, (c) delivering to the Company already-owned Shares having a Fair Market Value equal to the statutory amount required to be withheld, provided the delivery of such Shares will not result in any adverse accounting

consequences as the Administrator determines in its sole discretion, (d) selling a sufficient number of Shares otherwise deliverable to the Participant through such means as the Administrator may determine in its sole discretion (whether through a broker or otherwise) equal to the amount required to be withheld, or (e) retaining from salary or other amounts payable to the Participant cash having a sufficient value to satisfy the amount required to be withheld. The Fair Market Value of the Shares to be withheld or delivered will be determined as of the date that the taxes are required to be withheld.

- 17. No Effect on Employment or Service. Neither the Plan nor any Award will confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider with the Company, nor will they interfere in any way with the Participant's right or the Company's right to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.
- 18. <u>Date of Grant</u>. The date of grant of an Award will be, for all purposes, the date on which the Administrator makes the determination granting such Award, or such other later date as is determined by the Administrator. Notice of the determination will be provided to each Participant within a reasonable time after the date of such grant.
- 19. <u>Term of Plan</u>. The Plan will become effective as of shareholder approval in accordance with Section 23. The Plan will continue in effect for a term of ten (10) years from the earlier of the date the Plan is: (a) adopted by the Board or (b) approved by shareholders, unless terminated earlier under Section 20 of the Plan.

20. Amendment and Termination of the Plan.

- (a) Amendment and Termination. The Administrator may at any time amend, alter, suspend or terminate the Plan.
- (b) Shareholder Approval. The Company will obtain shareholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.
- (c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan will impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination.

21. Conditions Upon Issuance of Shares.

- (a) <u>Legal Compliance</u>. Shares will not be issued pursuant to the exercise of an Award unless the exercise of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.
- (b) <u>Investment Representations</u>. As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.
- 22. <u>Inability to Obtain Authority</u>. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, will relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority will not have been obtained.
- 23. <u>Shareholder Approval</u>. The Plan will be subject to approval by the shareholders of the Company at the Company's 2011 annual meeting of shareholders. Such shareholder approval will be obtained in the manner and to the degree required under Applicable Laws.

AVI BIOPHARMA, INC. FORM OF INDEMNIFICATION AGREEMENT

This Indemnification Agreement (this "Agreement") is dated as of [insert date], and is between AVI BioPharma, Inc., an Oregon corporation (the "Company"), and [insert name of indemnitee] ("Indemnitee").

RECITALS

- A. Indemnitee's service to the Company substantially benefits the Company.
- B. Individuals are reluctant to serve as directors or officers of corporations or in certain other capacities unless they are provided with adequate protection through insurance or indemnification against the risks of claims and actions against them arising out of such service.
- C. Indemnitee does not regard the protection currently provided by applicable law, the Company's governing documents and any insurance as adequate under the present circumstances, and Indemnitee may not be willing to serve as a director or officer without additional protection.
- D. In order to induce Indemnitee to continue to provide services to the Company, it is reasonable, prudent and necessary for the Company to contractually obligate itself to indemnify, and to advance expenses on behalf of, Indemnitee as permitted by applicable law.
- E. This Agreement is a supplement to and in furtherance of the indemnification provided in the Company's articles of incorporation and bylaws, and any resolutions adopted pursuant thereto, and this Agreement shall not be deemed a substitute therefor, nor shall this Agreement be deemed to limit, diminish or abrogate any rights of Indemnitee thereunder.

The parties therefore agree as follows:

1. Definitions.

- (a) "Corporate Status" describes the status of a person who is or was a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise.
 - (b) "OBCA" means the Oregon Business Corporation Act.
 - (c) "director" shall have the meaning set forth in ORS 60.387.
- (d) "Disinterested Director" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.
- (e) "Enterprise" means the Company and any other corporation, partnership, limited liability company, joint venture, trust, employee benefit plan or other enterprise of which Indemnitee is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary.
- (f) "Expenses" include all reasonable attorneys' fees, retainers, court costs, transcript costs, fees and costs of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be

a witness in, or otherwise participating in, a Proceeding. Expenses also include (i) Expenses incurred in connection with any appeal resulting from any Proceeding, including without limitation the premium, security for, and other costs relating to any cost bond, supersedeas bond or other appeal bond or their equivalent, and (ii) for purposes of Section 12(d), Expenses incurred by Indemnitee in connection with the interpretation, enforcement or defense of Indemnitee's rights under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

- (g) "Independent Counsel" means a law firm, or a partner or member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent (i) the Company or Indemnitee in any matter material to either such party (other than as Independent Counsel with respect to matters concerning Indemnitee under this Agreement, or other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement.
- (h) "Proceeding" means any threatened, pending or completed action, suit, arbitration, mediation, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative or investigative nature, including any appeal therefrom and including without limitation any such Proceeding pending as of the date of this Agreement, in which Indemnitee was, is or will be involved as a party, a potential party, a non-party witness or otherwise by reason of (i) the fact that Indemnitee is or was a director or officer of the Company, (ii) any action taken by Indemnitee or any action or inaction on Indemnitee's part while acting as a director or officer of the Company, or (iii) the fact that he or she is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise, in each case whether or not serving in such capacity at the time any liability or Expense is incurred for which indemnification, reimbursement or advancement of expenses can be provided under this Agreement.
- (i) Reference to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on a person with respect to any employee benefit plan; references to "serving at the request of the Company" shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in a manner he or she reasonably believed to be in the best interests of the participants in and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the Company" as referred to in this Agreement.
- 2. **Indemnity in Third-Party Proceedings.** The Company shall indemnify Indemnitee in accordance with the provisions of this Section 2 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding, other than a Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 2, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company and, with respect to any criminal Proceeding, had no reasonable cause to believe that his or her conduct was unlawful.
- 3. **Indemnity in Proceedings by or in the Right of the Company.** The Company shall indemnify Indemnitee in accordance with the provisions of this Section 3 if Indemnitee is, or is threatened to be made, a

party to or a participant in any Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 3, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company. No indemnification for Expenses shall be made under this Section 3 in respect of any claim, issue or matter as to which Indemnitee shall have been finally adjudged by a court of competent jurisdiction to be liable to the Company, unless and only to the extent that the court in which the Proceeding was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnification for such expenses as such court shall deem proper.

- 4. Indemnification for Expenses of a Party Who is Wholly or Partly Successful. To the extent that Indemnitee is a party to or a participant in and is successful (on the merits or otherwise) in defense of any Proceeding or any claim, issue or matter therein, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith. To the extent permitted by applicable law, if Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, in defense of one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with (a) each successfully resolved claim, issue or matter and (b) any claim, issue or matter related to any such successfully resolved claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.
- 5. **Indemnification for Expenses of a Witness.** To the extent that Indemnitee is, by reason of his or her Corporate Status, a witness in any Proceeding to which Indemnitee is not a party, Indemnitee shall be indemnified to the extent permitted by applicable law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith.

6. Additional Indemnification.

- (a) Notwithstanding any limitation in Sections 2, 3 or 4, the Company shall indemnify Indemnitee to the fullest extent permitted by applicable law if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding (including a Proceeding by or in the right of the Company to procure a judgment in its favor) against all Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with the Proceeding or any claim, issue or matter therein.
- (b) For purposes of Section 6(a), the meaning of the phrase "to the fullest extent permitted by applicable law" shall include, but not be limited to:
- (i) the fullest extent permitted by the provision of the OBCA that authorizes or contemplates additional indemnification by agreement, or the corresponding provision of any amendment to or replacement of the OBCA; and
- (ii) the fullest extent authorized or permitted by any amendments to or replacements of the OBCA adopted after the date of this Agreement that increase the extent to which a corporation may indemnify its officers and directors.
- 7. **Exclusions.** Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnity in connection with any Proceeding (or any part of any Proceeding):
- (a) for which payment has actually been made to or on behalf of Indemnitee under any statute, insurance policy, indemnity provision, vote or otherwise, except with respect to any excess beyond the amount paid;

- (b) for an accounting or disgorgement of profits pursuant to Section 16(b) of the Securities Exchange Act of 1934, as amended, or similar provisions of federal, state or local statutory law or common law, if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);
- (c) for any reimbursement of the Company by Indemnitee of any bonus or other incentive-based or equity-based compensation or of any profits realized by Indemnitee from the sale of securities of the Company, as required in each case under the Securities Exchange Act of 1934, as amended (including any such reimbursements that arise from an accounting restatement of the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), or the payment to the Company of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 306 of the Sarbanes-Oxley Act), if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);
- (d) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees, agents or other indemnitees, unless (i) the Company's board of directors authorized the Proceeding (or the relevant part of the Proceeding) prior to its initiation, (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law, (iii) otherwise authorized in Section 12(d) or (iv) otherwise required by applicable law;
- (e) in connection with a Proceeding by or in the right of the Company with respect to which a court of competent jurisdiction in a final judgment, not subject to appeal, determines that the Indemnitee is liable to the Company;
- (f) in connection with any other Proceeding respect to which a court of competent jurisdiction in a final judgment, not subject to appeal, determines that the Indemnitee received an improper personal benefit; or
 - (g) if prohibited by applicable law.
- 8. Advances of Expenses. The Company shall advance the Expenses incurred by Indemnitee in connection with any Proceeding, and such advancement shall be made as soon as reasonably practicable, but in any event no later than 30 days, after the receipt by the Company of a written statement or statements requesting such advances from time to time (which shall (a) include invoices received by Indemnitee in connection with such Expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditure made that would cause Indemnitee to waive any privilege accorded by applicable law shall not be included with the invoice, and (b) contain the affirmation required by Section 9(a)). Advances shall be unsecured and interest free and made without regard to Indemnitee's ability to repay such advances. Indemnitee hereby undertakes to repay any advance to the extent that it is ultimately determined by a court of competent jurisdiction in a final judgment, not subject to appeal, that Indemnitee is not entitled to be indemnified by the Company. This Section 8 shall not apply to the extent advancement is prohibited by law and shall not apply to any Proceeding for which indemnity is not permitted under this Agreement, but shall apply to any Proceeding referenced in Section 7(b) or 7(c) prior to a determination that Indemnitee is not entitled to be indemnified by the Company.

9. Procedures for Notification and Defense of Claim.

(a) Indemnitee shall notify the Company in writing of any matter with respect to which Indemnitee intends to seek indemnification or advancement of Expenses as soon as reasonably practicable following the receipt by Indemnitee of notice thereof. The written notification to the Company shall include (i) in reasonable detail, a description of the nature of the Proceeding and the facts underlying the Proceeding and (ii) an affirmation of the Indemnitee's good faith belief that: (A) the conduct of such Indemnitee was in good faith, (B) the Indemnitee reasonably believed that his conduct was in the best interests of the Company, or at least not opposed to the Company's best interests and (C) in the case of any criminal Proceeding, the Indemnitee had not reasonable cause to believe his conduct was unlawful. The failure by Indemnitee to notify the Company will not relieve the Company from any liability which it may have to Indemnitee hereunder or otherwise than under this Agreement, and any delay in so notifying the Company shall not constitute a waiver by Indemnitee of any rights.

- (b) If, at the time of the receipt of a notice of a Proceeding pursuant to the terms hereof, the Company has directors' and officers' liability insurance in effect, the Company shall give prompt notice of the commencement of the Proceeding to the insurers in accordance with the procedures set forth in the applicable policies. The Company shall thereafter take all commercially-reasonable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such Proceeding in accordance with the terms of such policies.
- (c) If the Company may be obligated to make any indemnity in connection with a Proceeding, the Company shall be entitled to assume the defense of such Proceeding with counsel approved by Indemnitee, which approval shall not be unreasonably withheld, upon the delivery to Indemnitee of written notice of its election to do so. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee for any fees or expenses of counsel subsequently incurred by Indemnitee with respect to the same Proceeding. Notwithstanding the Company's assumption of the defense of any such Proceeding, the Company shall be obligated to pay the fees and expenses of Indemnitee's counsel to the extent (i) the employment of counsel by Indemnitee is authorized by the Company, (ii) counsel for the Company or Indemnitee shall have reasonably concluded that there is a conflict of interest between the Company and Indemnitee in the conduct of any such defense such that Indemnitee needs to be separately represented, (iv) the Company is not financially or legally able to perform its indemnification obligations or (v) the Company shall not have retained, or shall not continue to retain, such counsel to defend such Proceeding. The Company shall have the right to conduct such defense as it sees fit in its sole discretion. Regardless of any provision in this Agreement, Indemnitee shall have the right to employ counsel in any Proceeding at Indemnitee's personal expense. The Company shall not be entitled, without the consent of Indemnitee, to assume the defense of any claim brought by or in the right of the Company.
 - (d) Indemnitee shall give the Company such information and cooperation in connection with the Proceeding as may be reasonably appropriate.
- (e) The Company shall not be liable to indemnify Indemnitee for any settlement of any Proceeding (or any part thereof) without the Company's prior written consent, which shall not be unreasonably withheld.
 - (f) The Company shall have the right to settle any Proceeding (or any part thereof) without the consent of Indemnitee.

10. Procedures upon Application for Indemnification.

- (a) To obtain indemnification, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and as is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification following the final disposition of the Proceeding. The Company shall, as soon as reasonably practicable after receipt of such a request for indemnification, advise the board of directors that Indemnitee has requested indemnification. Any delay in providing the request will not relieve the Company from its obligations under this Agreement, except to the extent such failure is prejudicial.
- (b) Upon written request by Indemnitee for indemnification pursuant to Section 10(a), a determination with respect to Indemnitee's entitlement thereto shall be made in the specific case (i) by a majority of a quorum consisting of the Disinterested Directors, or (ii) if such a quorum cannot be obtained under Section 10(b)(i), by a majority of a committee duly designated by the board of directors consisting solely of two or more (provided that, for the avoidance of doubt, it is acknowledged that directors who are not Disinterested Directors may participate in the designation of such committee), (iii) if a quorum cannot be obtained under Section 10(b)(i) and a committee cannot be designated under Section 10(b)(ii), by Independent Counsel in a written opinion to the board or directors, or (iv) if so directed by the Company's board of directors, by the shareholders of the Company. If it is determined that Indemnitee is entitled to indemnification, payment to Indemnitee shall be made within ten days after such determination. Indemnitee shall cooperate with the person, persons or entity making

the determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information that is not privileged or otherwise protected from disclosure and that is reasonably available to Indemnitee and reasonably necessary to such determination. Any costs or expenses (including attorneys' fees and disbursements) reasonably incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company, to the extent permitted by applicable law.

(c) If the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 10(b), the Independent Counsel shall be selected by the Company's board of directors, and the Company shall give written notice to Indemnitee advising him or her of the identity of the Independent Counsel so selected. Indemnitee may within ten days after such written notice of selection shall have been given, deliver to the Company a written objection to such selection; *provided*, *however*, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 1 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If such written objection is so made and substantiated, the Independent Counsel so selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit. If, within 20 days after the later of (i) submission by Indemnitee of a written request for indemnification pursuant to Section 10(a) hereof and (ii) the final disposition of the Proceeding, the parties have not agreed upon an Independent Counsel, either the Company or Indemnitee may petition a court of competent jurisdiction for resolution of any objection which shall have been made by the Indemnitee to the selection of Independent Counsel and for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 10(b) hereof. Upon the due commencement of any judicial proceeding or arbitration pursuant to Section 12(a) of this Agreement, the Independent Counsel shall be discharged and relieved of any furt

(d) The Company agrees to pay the reasonable fees and expenses of any Independent Counsel and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

11. Presumptions and Effect of Certain Proceedings.

- (a) In making a determination with respect to entitlement to indemnification hereunder, the person, persons or entity making such determination shall, to the fullest extent not prohibited by law, presume that Indemnitee is entitled to indemnification under this Agreement if Indemnitee has submitted a request for indemnification in accordance with Section 10(a) of this Agreement, and the Company shall, to the fullest extent not prohibited by law, have the burden of proof to overcome that presumption in connection with the making by such person, persons or entity of any determination contrary to that presumption.
- (b) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of *nolo contendere* or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself create a presumption that Indemnitee did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his or her conduct was unlawful.
- (c) For purposes of any determination of good faith, Indemnitee shall be deemed to have acted in good faith to the extent Indemnitee relied in good faith on (i) the records or books of account of the Enterprise, including financial statements, (ii) information supplied to Indemnitee by the officers of the Enterprise in the course of their duties, (iii) the advice of legal counsel for the Enterprise or its board of directors or counsel selected by any committee of the board of directors or (iv) information or records given or reports made to the

Enterprise by an independent certified public accountant, an appraiser, investment banker or other expert selected with reasonable care by the Enterprise or its board of directors or any committee of the board of directors. The provisions of this Section 11(c) shall not be deemed to be exclusive or to limit in any way the other circumstances in which Indemnitee may be deemed to have met the applicable standard of conduct set forth in this Agreement.

(d) Neither the knowledge, actions nor failure to act of any other director, officer, agent or employee of the Enterprise shall be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement.

12. Remedies of Indemnitee.

- (a) Subject to Section 12(e), if (i) a determination is made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 8 or 12(d) of this Agreement, (iii) no determination of entitlement to indemnification shall have been made pursuant to Section 10 of this Agreement within 90 days after the later of the receipt by the Company of the request for indemnification or the final disposition of the Proceeding, (iv) payment of indemnification pursuant to this Agreement is not made (A) within ten days after a determination has been made that Indemnitee is entitled to indemnification or (B) with respect to indemnification pursuant to Sections 4, 5 and 12(d) of this Agreement, within 30 days after receipt by the Company of a written request therefor, or (v) the Company or any other person or entity takes or threatens to take any action to declare this Agreement void or unenforceable, or institutes any litigation or other action or proceeding designed to deny, or to recover from, Indemnitee the benefits provided or intended to be provided to Indemnitee hereunder, Indemnitee shall be entitled to an adjudication by a court of competent jurisdiction of his or her entitlement to such indemnification or advancement of Expenses. Indemnitee shall commence such proceeding seeking an adjudication within 180 days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 12(a); provided, however, that the foregoing clause shall not apply in respect of a proceeding brought by Indemnitee to enforce his or her rights under Section 4 of this Agreement. The Company shall not oppose Indemnitee's right to seek any such adjudication in accordance with this Agreement.
- (b) Neither (i) the failure of the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or shareholders to have made a determination that indemnification of Indemnitee is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor (ii) an actual determination by the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or shareholders that Indemnitee has not met the applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has or has not met the applicable standard of conduct. If that a determination shall have been made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding commenced pursuant to this Section 12 shall be conducted in all respects as a *de novo* trial, on the merits, and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding commenced pursuant to this Section 12, the Company shall, to the fullest extent not prohibited by law, have the burden of proving Indemnitee is not entitled to indemnification or advancement of Expenses, as the case may be.
- (c) To the fullest extent not prohibited by law, the Company shall be precluded from asserting in any judicial proceeding commenced pursuant to this Section 12 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court that the Company is bound by all the provisions of this Agreement. If a determination shall have been made pursuant to Section 10 of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding commenced pursuant to this Section 12, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statements not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law.

- (d) To the extent not prohibited by law, the Company shall indemnify Indemnitee against all Expenses that are incurred by Indemnitee in connection with any action for indemnification or advancement of Expenses from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company to the extent Indemnitee is successful in such action, and, if requested by Indemnitee, shall (as soon as reasonably practicable, but in any event no later than 30 days, after receipt by the Company of a written request therefor) advance such Expenses to Indemnitee, subject to the provisions of Section 8.
- (e) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification shall be required to be made prior to the final disposition of the Proceeding.
- 13. **Contribution.** To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amounts incurred by Indemnitee, whether for Expenses, judgments, fines or amounts paid or to be paid in settlement, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the events and transactions giving rise to such Proceeding; and (ii) the relative fault of Indemnitee and the Company (and its other directors, officers, employees and agents) in connection with such events and transactions.
- 14. **Non-exclusivity.** The rights of indemnification and to receive advancement of Expenses as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Company's articles of incorporation or bylaws, any agreement, a vote of shareholders or a resolution of directors, or otherwise. To the extent that a change in Oregon law, whether by statute or judicial decision, permits greater indemnification or advancement of Expenses than would be afforded currently under the Company's articles of incorporation and bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change, subject to the restrictions expressly set forth herein or therein. Except as expressly set forth herein, no right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. Except as expressly set forth herein, the assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.
- 15. **No Duplication of Payments.** The Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder (or for which advancement is provided hereunder) if and to the extent that Indemnitee has otherwise actually received payment for such amounts under any insurance policy, contract, agreement or otherwise.
- 16. **Insurance.** To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, trustees, general partners, managing members, officers, employees, agents or fiduciaries of the Company or any other Enterprise, Indemnitee shall be covered by such policy or policies to the same extent as the most favorably-insured persons under such policy or policies in a comparable position.
- 17. **Subrogation.** In the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.
- 18. **Services to the Company.** Indemnitee agrees to serve as a director or officer of the Company or, at the request of the Company, as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of another Enterprise, for so long as Indemnitee is duly elected or appointed or until Indemnitee tenders

his or her resignation or is removed from such position. Indemnitee may at any time and for any reason resign from such position (subject to any other contractual obligation or any obligation imposed by operation of law), in which event the Company shall have no obligation under this Agreement to continue Indemnitee in such position. This Agreement shall not be deemed an employment contract between the Company (or any of its subsidiaries or any Enterprise) and Indemnitee. Indemnitee specifically acknowledges that any employment with the Company (or any of its subsidiaries or any Enterprise) is at will, and Indemnitee may be discharged at any time for any reason, with or without cause, with or without notice, except as may be otherwise expressly provided in any executed, written employment contract between Indemnitee and the Company (or any of its subsidiaries or any Enterprise), any existing formal severance policies adopted by the Company's board of directors or, with respect to service as a director or officer of the Company, the Company's articles of incorporation or bylaws or the OBCA. No such document shall be subject to any oral modification thereof.

- 19. **Duration.** This Agreement shall continue until and terminate upon the later of (a) ten years after the date that Indemnitee shall have ceased to serve as a director or officer of the Company or as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of any other Enterprise, as applicable; or (b) one year after the final termination of any Proceeding, including any appeal, then pending in respect of which Indemnitee is granted rights of indemnification or advancement of Expenses hereunder and of any proceeding commenced by Indemnitee pursuant to Section 12 of this Agreement relating thereto.
- 20. Successors. This Agreement shall be binding upon the Company and its successors and assigns, including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business or assets of the Company, and shall inure to the benefit of Indemnitee and Indemnitee's heirs, executors and administrators. The Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company, by written agreement, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.
- 21. Severability. Nothing in this Agreement is intended to require or shall be construed as requiring the Company to do or fail to do any act in violation of applicable law. The Company's inability, pursuant to court order or other applicable law, to perform its obligations under this Agreement shall not constitute a breach of this Agreement. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (i) the validity, legality and enforceability of the remaining provisions of this Agreement (including without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; (ii) such provision or provisions shall be deemed reformed to the extent necessary to conform to applicable law and to give the maximum effect to the intent of the parties hereto; and (iii) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby.
- 22. **Enforcement.** The Company expressly confirms and agrees that it has entered into this Agreement and assumed the obligations imposed on it hereby in order to induce Indemnitee to serve as a director or officer of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director or officer of the Company.
- 23. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof; *provided*, *however*, that this Agreement is a supplement to and in furtherance of the Company's articles of incorporation and bylaws and applicable law.

- 24. **Modification and Waiver.** No supplement, modification or amendment to this Agreement shall be binding unless executed in writing by the parties hereto. No amendment, alteration or repeal of this Agreement shall adversely affect any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her Corporate Status prior to such amendment, alteration or repeal. No waiver of any of the provisions of this Agreement shall constitute or be deemed a waiver of any other provision of this Agreement nor shall any waiver constitute a continuing waiver.
- 25. **Notices.** All notices and other communications required or permitted hereunder shall be in writing and shall be mailed by registered or certified mail, postage prepaid, sent by facsimile or electronic mail or otherwise delivered by hand, messenger or courier service addressed:
- (a) if to Indemnitee, to Indemnitee's address, facsimile number or electronic mail address as shown on the signature page of this Agreement or in the Company's records, as may be updated in accordance with the provisions hereof; or
- (b) if to the Company, to the attention of the Chief Executive Officer or Chief Financial Officer of the Company at AVI BioPharma, Inc. 3450 Monte Villa Parkway, Bothell, Washington 98021, Fax: 425-489-5933, or at such other current address as the Company shall have furnished to Indemnitee, with a copy (which shall not constitute notice) to Michael Nordtvedt, Wilson Sonsini Goodrich & Rosati, P.C., 701 Fifth Avenue, Suite 5100, Seattle, Washington 98104, Fax: 206-883-2699.

Each such notice or other communication shall for all purposes of this Agreement be treated as effective or having been given (i) if delivered by hand, messenger or courier service, when delivered (or if sent *via* a nationally-recognized overnight courier service, freight prepaid, specifying next-business-day delivery, one business day after deposit with the courier), or (ii) if sent *via* mail, at the earlier of its receipt or five days after the same has been deposited in a regularly-maintained receptacle for the deposit of the United States mail, addressed and mailed as aforesaid, or (iii) if sent *via* facsimile, upon confirmation of facsimile transfer or, if sent *via* electronic mail, upon confirmation of delivery when directed to the relevant electronic mail address, if sent during normal business hours of the recipient, or if not sent during normal business hours of the recipient, sent business day.

- 26. Applicable Law and Consent to Jurisdiction. This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Oregon, without regard to its conflict of laws rules. The Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Oregon state courts, and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Oregon state courts for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) appoint, to the extent such party is not otherwise subject to service of process in the State of Oregon, National Registered Agents, Inc. as its agent in the State of Oregon as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party personally within the State of Oregon, (iv) waive any objection to the laying of venue of any such action or proceeding in the Oregon state courts, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Oregon state courts has been brought in an improper or inconvenient forum.
- 27. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. This Agreement may also be executed and delivered by facsimile signature and in counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

28. **Captions.** The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

(signature page follows)

The parties are signing this Indemnification Agreement as of the date stated in the introductory sentence.

AVI BIOPHARMA, INC.

| (Signature) | |
|--------------------------|-----|
| (Print name) | |
| (Title) | |
| [INSERT INDEMNITEE NAME] | |
| (Signature) | |
| (Print name) | |
| (Street address) |) |
| (City, State and Z | IP. |

(Signature page to Indemnification Agreement)

Appendix C

FOURTH RESTATED AND AMENDED ARTICLES OF INCORPORATION OF AVI BIOPHARMA, INC.

Pursuant to ORS 60.437 and 60.451, the Board of Directors and the shareholders of AVI BioPharma, Inc. (the "Corporation") hereby restate and amend the Corporation's Third Restated and Amended Articles of Incorporation, as amended, dated January 20, 1997.

ARTICLE I Name

The name of the Corporation is AVI BioPharma, Inc.

ARTICLE II Shares of Stock

- 2.1 Authorized Capital. The Corporation is authorized to issue two classes of stock which are designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares of stock which the Corporation shall have authority to issue shall be 320,000,000, consisting of 300,000,000 shares of Common Stock, having \$0.0001 par value per share, and 20,000,000 shares of Preferred Stock, having \$0.0001 par value per share.
- 2.2 Common Stock. Subject to any preferential or other rights granted to any series of Preferred Stock, the holders of shares of the Common Stock shall be entitled to receive dividends out of funds of the Corporation legally available therefor, at the rate and at the time or times as may be provided by the Board of Directors and shall be entitled to receive distributions legally payable to shareholders on the liquidation of the Corporation. The holders of shares of Common Stock, on the basis of one vote per share, shall have the right to vote for the election of members of the Board of Directors of the Corporation and the right to vote on all other matters, except where a separate class or series of the Corporation's shareholders vote by class or series is authorized by law or the Corporation's bylaws. Except as otherwise provided in authorizing preferred stock, holders of all shares, regardless of class, shall be entitled to receive the net assets of the Corporation upon dissolution on a pro rata basis.

2.3 Preferred Stock.

- 2.3.1 Issuance of Preferred Stock in Series. The shares of Preferred Stock may be issued from time to time in one or more series in any manner permitted by law and the provisions of the Articles of Incorporation of the Corporation, as determined from time to time by the Board of Directors and stated in the resolution or resolutions providing for the issuance thereof, prior to the issuance of any shares thereof. The Board of Directors shall have the authority to fix and determine, subject to the provisions hereof, the rights and preferences of the shares of any series so established, including, without limitation, the rate of dividend, whether the dividend shall be cumulative, whether shares may be redeemed and, if so, the redemption price and the terms and conditions of redemption, the amount payable upon shares in the event of voluntary or involuntary liquidation, sinking fund provisions, if any, for the redemption or purchase of shares, the terms and conditions, if any, on which shares may be converted, and voting rights, if any.
- 2.3.2 *Dividends*. The holders of shares of the Preferred Stock shall be entitled to receive dividends, out of the funds of the Corporation legally available therefor, at the rate and at the time or times

as may be provided by the Board of Directors in designating a particular series of Preferred Stock. If such dividends on the Preferred Stock shall be cumulative, and if dividends shall not have been paid, then the deficiency shall be fully paid or the dividends declared and set apart for payment at such rate, but without interest on cumulative dividends, before any dividends on the Common Stock shall be paid or declared and set apart for payment. Unless otherwise provided by the Board of Directors in designating a particular series of Preferred Stock, the holders of the Preferred Stock shall not be entitled to receive any dividends thereon other than the dividends referred to in this section.

- 2.3.3 *Redemption.* The Preferred Stock may be redeemed in such amount, and at such time or times as may be provided by the Board of Directors in designating a particular series of Preferred Stock. In any event, such Preferred Stock may be repurchased by the Corporation to the extent legally permissible.
- 2.3.4 Liquidation. In the event of any liquidation, dissolution, or winding up of the affairs of the Corporation, whether voluntary or involuntary, then, before any distribution shall be made to the holders of the Common Stock, the holders of the Preferred Stock at the time outstanding shall be entitled to be paid the preferential amount or amounts as may be provided by the Board of Directors in designating a particular series of Preferred Stock per share and dividends accrued thereon to the date of such payment. The holders of the Preferred Stock shall not be entitled to receive any distributive amounts upon the liquidation, dissolution, or winding up of the affairs of the Corporation other than the distributive amounts referred to in this section, unless otherwise provided by the Board of Directors in designating a particular series of Preferred Stock.
- 2.3.5 Conversion. The Board of Directors may provide that shares of a particular series of Preferred Stock may be converted into Common Stock of the Corporation at the option of the holders of such Preferred Stock, at such rate and subject to such adjustments as may be provided by the Board of Directors.
- 2.3.6 Voting Rights. Holders of Preferred Stock shall have such voting rights as may be provided by the Board of Directors in designating a particular series of Preferred Stock.

ARTICLE III Staggered Terms of Directors

- 3.1 When there are six or more positions on the Board of Directors, those positions shall be divided into two equal or nearly equal groups, denoted Group I and Group II. Beginning at the 1992 annual shareholders meeting, in even years shareholders will elect directors to fill all Group I positions and in odd years shareholders will elect directors to fill all Group II positions.
- 3.2 This Article may not be amended, altered, changed or repealed in any respect unless such action is approved by the affirmative vote of the holders of not less than 66-2/3 percent of the shares then entitled to vote at an election of directors.

ARTICLE IV
No Preemptive Rights

The Corporation elects to waive preemptive rights.

ARTICLE V Limitation on Liability

No director of the Corporation shall be personally liable to the Corporation or its shareholders for monetary damages for conduct as a director, provided that this Article shall not eliminate the liability of a director for any act or omission for which such elimination of liability is not permitted under the Act. No amendment to the Act that further limits the acts or omissions for which elimination of liability is permitted shall affect the liability of a director for any act or omission which occurs prior to the effective date of the amendment.

ARTICLE VI Indemnification

The Corporation shall indemnify to the fullest extent not prohibited by law any current or former director of the Corporation who is made, or threatened to be made, a party to an action, suit or proceeding, whether civil, criminal, administrative, investigative or other (including an action, suit or proceeding by or in the right of the Corporation), by reason of the fact that such person is or was a director, officer, employee or agent of the Corporation or a fiduciary within the meaning of the Employee Retirement Income Security Act of 1974 with respect to any employee benefit plan of the Corporation, or serves or served at the request of the Corporation as a director, officer, employee or agent, or as a fiduciary of an employee benefit plan, of another corporation, partnership, joint venture, trust or other enterprise. The Corporation shall pay for or reimburse the reasonable expenses incurred by any such current or former director in any such proceeding in advance of the final disposition of the proceeding if the person sets forth in writing (i) the person's good faith belief that the person is entitled to indemnification under this Article and (ii) the person's agreement to repay all advances if it is ultimately determined that the person is not entitled to indemnification under this Article. No amendment to this Article that limits the Corporation's obligation to indemnify any person shall have any effect on such obligation for any act or omission that occurs prior to the later of the effective date of the amendment or the date notice of the amendment is given to the person. This Article shall not be deemed exclusive of any other provisions for indemnification or advancement of expenses of directors, officers, employees, agents and fiduciaries that may be included in any statute, bylaw, agreement, general or specific action of the Board of Directors, vote of shareholders or other document or arrangement.

ARTICLE VII Address for Notices

The address of the registered office of the Corporation is 325 13th Street NE, Suite 501, Salem, OR 97301, and the name of its registered agent at such address is National Registered Agents, Inc. Any notices required by the Act to be sent to the Corporation may be sent to the registered agent at the above address.

| DATED the | day of | , 2011. |
|-----------|--------|---------|
|-----------|--------|---------|

YOUR VOTE IS IMPORTANT. PLEASE VOTE TODAY.

We encourage you to take advantage of Internet or telephone voting. Both are available 24 hours a day, 7 days a week.

Internet and telephone voting is available through 11:59 PM Eastern Time the day prior to the shareholder meeting date.

AVI BIOPHARMA, INC.

INTERNET

http://www.proxyvoting.com/avii

Use the Internet to vote your proxy. Have your proxy card in hand when you access the web site.

TELEPHONE 1-866-540-5760

Use any touch-tone telephone to vote your proxy. Have your proxy card in hand when you call.

If you vote your proxy by Internet or by telephone, you do NOT need to mail back your proxy card.

To vote by mail, mark, sign and date your proxy card and return it in the enclosed postage-paid envelope.

Your Internet or telephone vote authorizes the named proxies to vote your shares in the same manner as if you marked, signed and returned your proxy card.

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| THIS PROXY WILL BE VOTED AS DIRECTED, OR IF DIRECTORS, "FOR" ITEMS 2, 3, 5, 6 AND 7 AND "EV | | | Please mark your votes as indicated in this example |
| THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR PROPO- ITEM 1. ELECTION OF DIRECTORS. Bect three Group II directors for two-year terms or until their respective successors are elected and qualified. Nominees: Of Kathleen Behrens O2 Arthrory Chaste O3 John Hodgman INSTRUCTIONS: To withhold authority to vote for any individual no- lock above and write that nominee's name in the space provided be | FOR WITHOUT EXCEPTIONS ALL FOR ALL minee, mark the "Exceptions" | THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR PROPOSAL 3. ITEM 3. ADVISORY VOTE ON EXECUTIVE COMPENSATION. Approve, by now-hinding vote, the compensation of our named executive officers. THE BOARD OF DIRECTORS RECOMMENDS A VOTE OF EVERY THREE YEARS FOR PROPOSAL 4. TOTEM 4. ADVISORY VOTE ON REGOURNOY OF ADVISORY VOTE OR EXECUTIVE COMPENSATION. To recommend, by not endingly vote, by the propency of the advisory vote on the compensation of our named executive officers. | EVERY EVERY |
| THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR PROPOSAL 2: TEM 2. APPROVAL OF THE 2011 EQUITY INCENTIVE PLAN. Approve the adoption of the 2011 Equity Incentive Plan. | FOR AGAINST ABSTAIN | THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR PROPOSAL S. ITEMS. RATIFICATION OF FORM OF INDENNIFICATION AGREEMENT FOR AM BIOPPHARMAS DIRECTORS. Ratify the form of indernationation agreement. THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR PROPOSAL 6. ITEMS. ADOPTION OF RESTATED AND AMENDED ARTICLES OF INCOMPONITION. THE MACROPHONION. THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR PROPOSAL 7. ITEMS. THE DOARD OF DIRECTORS RECOMMENDS A VOTE FOR PROPOSAL 7. ITEMS. THE PROPOSAL 7. | FOR AGARNST ABSTAN |
| | ESTRICTED AREA | - SCAN LINE executor, administrator, trustee or quardian, please give full title as such. | Address Change or Comments SEE REVERSE |
| Signature | Signature | | Date |

You can now access your AVI BioPharma, Inc. account online.

Access your AVI BioPharma, Inc. account online via Investor ServiceDirect[®] (ISD).

BNY Mellon Shareowner Services, the transfer agent for AVI BioPharma, Inc., now makes it easy and convenient to get current information on your shareholder account.

- View account status
- · View certificate history
- · View book-entry information
- · View payment history for dividends
- Make address changes
- · Obtain a duplicate 1099 tax form

Visit us on the web at http://www.bnymellon.com/shareowner/equityaccess For Technical Assistance Call 1-877-978-7778 between 9am-7pm Monday-Friday Eastern Time

Investor ServiceDirect®

Available 24 hours per day, 7 days per week

TOLL FREE NUMBER: 1-800-370-1163

Choose MLinks for fast, easy and secure 24/7 online access to your future proxy materials, investment plan statements, tax documents and more. Simply log on to Investor ServiceDirect® at www.brymellon.com/shareowner/equityaccess where step-by-step instructions will prompt you through enrollment.

Important notice regarding the Internet availability of proxy materials for the 2011 Annual Meeting of Shareholders. The Proxy Statement and the 2010 Annual Report to Shareholders are available at: http://bnymellon.mobular.net/bnymellon/avii

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PROXY

AVI BIOPHARMA, INC.

2011 Annual Meeting of Shareholders – June 13, 2011 THIS PROXY IS SOLICITED BY THE BOARD OF DIRECTORS OF THE COMPANY

The undersigned hereby appoints Christopher Garabedian and Effie Toshav, and each of them, with power to act without the other and with power of substitution, as proxies and attorneys-in-fact and hereby authorizes them to represent and vote, as provided on the other side, all the shares of AVI BioPharma, Inc. Common Stock which the undersigned is entitled to vote, and, in their discretion, to vote upon such other business as may properly come before the 2011 Annual Meeting of Shareholders of the company to be held June 13, 2011 or at any adjournment or postponement thereof, with all powers which the undersigned would possess if present at the Meeting.

Address Change/Comments
(Mark the corresponding box on the reverse side)

BNY MELLON SHAREOWNER SERVICES P.O. BOX 3550 SOUTH HACKENSACK, NJ 07606-9250

SOUTH HACKENSACK, NJ 07606-9250
RESTRICTED AREA - SCAN LINE

(Continued and to be marked, dated and signed, on the other side)

99109

RESTRICTED AREA - SIGNATURE LINES