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

SCHEDULE 14A

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
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AVI BIOPHARMA, INC.

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - (1) Title of each class of securities to which transaction applies:

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

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 - (1) Amount Previously Paid:

 - (2) Form, Schedule or Registration Statement No.:

 - (3) Filing Party:

 - (4) Date Filed:

May 4, 2010

Dear Shareholder:

You are cordially invited to attend the Annual Meeting of the Shareholders of AVI BioPharma, Inc., which will be held on June 7, 2010, at 2 p.m., local time, at the Country Inn, 19333 North Creek Parkway, Bothell, Washington 98011.

Details of the business to be conducted at the Annual Meeting are given in the attached Proxy Statement. The Company's Annual Report on Form 10-K and 10-K/A for the year ended December 31, 2009 is also enclosed.

Whether or not you plan to attend the meeting, it is important that your shares be represented and voted at the meeting. Therefore, I urge you to sign, date, and promptly return the enclosed proxy in the enclosed postage-paid envelope. If you decide to attend the Annual Meeting and vote in person, you will, of course, have that opportunity. If you receive more than one proxy card because your shares are registered in different names or at different addresses, please sign and return each such proxy so that all of your shares will be represented at the Annual Meeting.

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

Sincerely,

A handwritten signature in black ink that reads "J. David Boyle II". The signature is written in a cursive style with a large, stylized initial "J".

J. David Boyle II,
Interim President and Chief Executive Officer

AVI BIOPHARMA, INC.

NOTICE OF ANNUAL MEETING

To Be Held on June 7, 2010

To the Shareholders of AVI BioPharma, Inc.:

NOTICE IS HEREBY GIVEN that the Annual Meeting of the shareholders of AVI BioPharma, Inc. (the "Company" or "AVI") will be held on June 7, 2010 at 2 p.m., local time, the Country Inn, 19333 North Creek Parkway, Bothell, Washington 98011 for the following purposes:

1. To consider and vote upon a proposal to elect four Group I Directors, each for a two-year term;
2. To consider and vote upon a proposal to ratify the appointment of KPMG LLP as independent registered public accounting firm for the Company for the year ending December 31, 2010; and
3. To transact such other business as may properly come before the meeting.

The Board of Directors has fixed March 31, 2010 as the record date for the determination of shareholders entitled to notice of and to vote at the Annual Meeting. Only shareholders of record at the close of business on that date will be entitled to notice of and to vote at the Annual Meeting or any adjournments thereof.

By Order of the Board of Directors

A handwritten signature in black ink that reads "J. David Boyle II". The signature is written in a cursive style with a large, looping initial "J".

J. David Boyle II,
Interim President and Chief Executive Officer

Bothell, Washington
May 4, 2010

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AVI BIOPHARMA, INC.
3450 Monte Villa Parkway, Suite 101
Bothell, Washington 98021

PROXY STATEMENT
for
ANNUAL MEETING OF SHAREHOLDERS
TO BE HELD ON JUNE 7, 2010

General

This Proxy Statement is furnished to shareholders of AVI BioPharma, Inc. (the "Company" or "AVI") in connection with the solicitation by the Board of Directors of proxies from the shareholders of record of the Company's outstanding shares of Common Stock, \$0.0001 par value (the "Common Stock"), for use at the Company's Annual Meeting of Shareholders to be held on June 7, 2010, at 2 p.m., local time, at the Country Inn, 19333 North Creek Parkway, Bothell, Washington 98011, and at any adjournments or postponements thereof (the "Annual Meeting").

At the Annual Meeting, shareholders will be asked to consider and vote upon proposals to (i) elect four members to Group I of the Board of Directors, each for a two-year term, (ii) ratify the appointment of KPMG LLP as independent registered public accounting firm for the Company for the year ending December 31, 2010, and (iii) transact such other business as may properly come before the meeting. This Proxy Statement, together with the enclosed proxy card, is first being mailed to the Company's shareholders on or about May 4, 2010.

Solicitation, Voting and Revocability of Proxies

The Board of Directors has fixed March 31, 2010 as the record date for the determination of the shareholders entitled to notice of and to vote at the Annual Meeting. Accordingly, only holders of record of shares of Common Stock at the close of business on such date will be entitled to notice of and to vote at the Annual Meeting or any adjournments thereof, with each such share entitling its owner to one vote on all matters properly presented at the Annual Meeting. On the record date, there were approximately 11,697 beneficial owners of the 110,374,160 shares of Common Stock then outstanding. The presence, in person or by proxy, of a majority of the total number of outstanding shares of Common Stock entitled to vote at the Annual Meeting is necessary to constitute a quorum at the Annual Meeting. If less than a majority of 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.

If the enclosed form of proxy is properly executed and returned in time to be voted at the Annual Meeting, the shares represented thereby will be voted in accordance with the instructions marked therein. **EXECUTED BUT UNMARKED PROXIES WILL BE VOTED FOR (i) THE ELECTION OF THE DIRECTORS NAMED IN THE PROXY, AND (ii) RATIFICATION OF THE APPOINTMENT OF KPMG LLP AS INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE YEAR ENDING DECEMBER 31, 2010.** The Board of Directors does not know of any matters other than those described in the Notice of Annual Meeting that are to come before the Annual Meeting. If any other matters are properly brought before the Annual Meeting, the persons named in the proxy will vote the shares represented by such proxy in their discretion upon such matters.

The presence of a shareholder at the Annual Meeting will not automatically revoke such shareholder's proxy. A shareholder may, however, revoke a proxy at any time prior to its exercise by (i) filing a written notice of revocation, (ii) delivering a duly executed proxy bearing a later date to,

Secretary, AVI BioPharma, Inc., 3450 Monte Villa Parkway, Suite 101, Bothell, Washington 98021, or (iii) attending the Annual Meeting and voting in person. In order to be effective, all revocations or later-filed proxies must be delivered to the Company at the Bothell, Washington address not later than 5:00 p.m. local time on the business day prior to the day of the Annual Meeting. All valid, unrevoked proxies will be voted at the Annual Meeting. Under Oregon law, shareholders are not entitled to dissenter's rights with respect to any of the proposals set forth in this Proxy Statement.

AVI BIOPHARMA, INC. DIRECTORS, DIRECTOR NOMINEES 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 AVI:

Name	Age	Position(4)
J. David Boyle II	56	Interim Chief Executive Officer and President, Senior Vice President, and Chief Financial Officer
Patrick L. Iversen, Ph.D.	54	Senior Vice President of Strategic Alliances
Ryszard Kole, Ph.D.	63	Senior Vice President of Discovery Research
Paul Medeiros	48	Senior Vice President of Business Development, Chief Business Officer and Secretary
Stephen B. Shrewsbury, M.D.	53	Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer
Dwight D. Weller, Ph.D.	59	Senior Vice President of Chemistry and Manufacturing
Michael D. Casey(1)(3)	64	Group I Director, Chairman of the Board
William A. Goolsbee(1)(3)	56	Group I Director
John C. Hodgman(2)	55	Group II Director
Gil Price, M.D.(2)	54	Group I Director
M. Kathleen Behrens, Ph.D.(2)	57	Group II Director
Christopher S. Henney, Ph.D., D.Sc.	69	Group I Director
Anthony Chase(3)	55	Group II Director
Chris Garabedian	43	Group I Director Nominee
Hans Wigzell	71	Group I Director Nominee

(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 I Directors expire as of the date of the 2010 Annual Meeting, and the terms of Group II Directors expire as of the date of the 2011 Annual Meeting.

J. David Boyle II, has served as Interim Chief Executive Officer and President since April 20, 2010, and as Senior Vice President and Chief Financial Officer of the Company since August 18, 2008. Mr. Boyle also previously served as the Company's Secretary from September 29, 2008 to April 20, 2010. In the five years prior to his appointment as the Company's 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 the 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.

Patrick L. Iversen, Ph.D., has served as Senior Vice President of Strategic Alliances since April 10, 2008. From 1997 until April 10, 2008, Dr. Iversen previously served as the Company's Senior Vice President of Research and Development. He also served as a director of the Company from 1997 through May 2005. From 1987 through 1997, Dr. Iversen was on staff at the University of Nebraska Medical Center, most recently as a Professor in the College of Medicine. Dr. Iversen, who has published extensively on antisense research and development, additionally served as a consultant to various pharmaceutical and biotechnology companies, including GLAXO Inc., Innovir Pharmaceuticals, Lynx Therapeutics, and Isis Pharmaceuticals, as well as to the Company. He is a former member of the Leukemia Society of America Board of Directors. Dr. Iversen holds a B.S. in Biology from Westminster College and a Ph.D. in Biochemical Pharmacology and Toxicology from the University of Utah, followed by post-doctoral work at the Eppley Institute for Research in Cancer and Allied Diseases. Current services activities include being a reviewer for the ONC-L and BST-S study sections of the National Institutes of Health.

Ryszard Kole, Ph.D., has served as Senior Vice President of Discovery Research since April 10, 2008. Prior to his appointment as Senior Vice President of Discovery Research, Dr. Kole had served as a consultant to the Company after the closing of the Company's acquisition of Ercole Biotech, Inc., a privately held Delaware corporation ("Ercole"), on March 20, 2008. Prior to his service as a consultant with the Company and Ercole's acquisition by the Company, Dr. Kole served as President, Chief Scientific Officer and a member of the Board of Directors of Ercole from the time he founded Ercole in 2001. He served as a compensated consultant to Ercole from September 2007 until its acquisition in March 2008. As a member of Ercole's senior management, Dr. Kole had primary responsibility for managing Ercole's internal and collaborative research activities. At the time of its acquisition, Ercole had six full-time employees and two part-time consultants, including Dr. Kole. In addition to his work with Ercole, Dr. Kole had also been employed by the University of North Carolina at Chapel Hill ("UNC") in the Department of Pharmacology as a Professor from 1996 until April 2008. Dr. Kole holds a Ph.D. in Natural Sciences from the Institute of Biochemistry and Biophysics, Polish Academy of Sciences in Warsaw, Poland.

Paul Medeiros, has served as the Senior Vice President of Business Development and Chief Business Officer since May 19, 2009, and has served as Secretary since April 20, 2010. In the five years prior to his appointment as the Company's Senior Vice President of Business Development and Chief Business Officer, Mr. Medeiros worked for Schering-Plough. Most recently, Mr. Medeiros served as Vice President, Global Licensing and Strategic Alliances for Schering-Plough, 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, Medeiros was employed by Merck & Company, where he held positions in Field Sales, New Product Planning and Worldwide Human Health Marketing. 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 Professional*[™].

Stephen B. Shrewsbury, M.D., has served as Chief Medical Officer and Senior Vice President of Preclinical, Clinical and Regulatory Affairs since January 26, 2009. In the five years prior to his appointment as the Company's Chief Medical Officer and Senior Vice President of Preclinical, Clinical and Regulatory Affairs, 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 & Senior Vice President, Clinical Development, Medical and Regulatory Affairs

of Adamas Pharmaceuticals Inc. from March 2008 to August 2008. He joined Adamas Pharmaceuticals Inc. in March 2008 from MAP Pharmaceuticals Inc., where he served from February 2005 to March 2008 as Chief Medical Officer, Formerly Vice President, Clinical and Regulatory Affairs. 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 U.S. from 1993 until 2002. Dr. Shrewsbury holds a Bachelor of Medicine and a Bachelor of Surgery degree from the University of Liverpool, UK.

Dwight D. Weller, Ph.D., has served as Senior Vice President of Chemistry and Manufacturing of the Company since 1997, as Vice President of Research and Development of the Company from 1992 to 1997, and as a director of the Company from 1991 through May 2006. Dr. Weller received a B.S. in Chemistry from Lafayette College and a Ph.D. in Chemistry from the University of California at Berkeley, followed by postdoctoral work in Bio-Organic Chemistry at the University of Illinois. Dr. Weller was on the faculty of Oregon State University from 1978 to 1992.

Michael D. Casey, has served as a director of the Company since May 2006 and was appointed the Chairman effective March 10, 2008. In addition to serving as Chairman of the Board, Mr. Casey also serves as Chairman of the Compensation Committee. Mr. Casey's experience in leadership positions in public companies in the biopharmaceutical industry qualifies him for service as a member of the Board of Directors. Since 2002, Mr. Casey has served as a director of several public biopharmaceutical companies. Previously, Mr. Casey served four years as President, Chief Executive Officer and Chairman of Matrix Pharmaceutical, Inc., a biopharmaceutical company, until Chiron Corporation acquired Matrix in 2002. Prior to joining Matrix, Mr. Casey was President of two divisions of Schein Pharmaceutical, Inc. from 1995 to 1997, and President and Chief Operating Officer of Genetic Therapy, Inc. from 1993 to 1995 until it was sold to Sandoz (Novartis). Mr. Casey also spent 25 years with Johnson & Johnson, including serving as Vice President of Sales and Marketing of Ortho Pharmaceutical Corporation and President of McNeil Pharmaceuticals. Mr. Casey is a director of Celgene Corp. and Durect Corporation. In the past five years, Mr. Casey has also served as a director of Allos Therapeutics, Cholestech Corporation, Bone Care International, Inc., OrthoLogic Corporation, and Sicor, Inc.

William A. Goolsbee, has served as a director of the Company since October 2007. He also serves as the Chairman of the Nominating and Corporate Governance Committee. 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 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 the company by the Company in 1998. Experience prior to 1987 includes a series of increasingly responsible executive positions with CooperVision Inc. and Cooper Laboratories Inc. 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.

John C. Hodgman, has served as a director of the Company since March 2004. He also serves as the Chairman of the Audit Committee and as the Audit Committee's financial expert. 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. He has served as the Senior Vice President of Finance, 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 the 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. In the past five years, Mr. Hodgman has also served as a director of Inflazyme Pharmaceuticals, Ltd., Alpha Innotech Corporation, and Aerogen, Inc.

Gil Price, M.D., has served as a director of the Company since October 2007. 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 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. From 1997 to 2002, Dr. Price was the director of clinical development for oncology at MedImmune Inc. Prior to joining MedImmune, Dr. Price worked in the CRO 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 the 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.

M. Kathleen Behrens, Ph.D., has served as a director of the Company since March 2009. 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 served as a member of the President's Council of Advisors on Science and Technology (PCAST) from 2001 to early 2009 and she was Chair 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 (STEP) for the National Research Council, and from 1993 to 2000 she was a director, President, Chair and Past Chair of the National Venture Capital Association. Dr. Behrens holds a Ph.D. in Microbiology from the University of California, Davis. Dr. Behrens is a director of Amylin Pharmaceuticals, Inc. In the past five years, Dr. Behrens has also served as a director of Abgenix, Inc.

Christopher S. Henney, Ph.D., D.Sc., has served as a director of the Company since March 2009. Dr. Henney's significant executive-level and board experience at biotechnology companies qualifies him to serve as a member of the Board of Directors. Dr. Henney co-founded three major publicly held U.S. biotechnology companies, Immunex Corporation, ICOS Corporation and Dendreon Corporation, and was a board member and held executive positions at each company. From 1995 to January 2003, Dr. Henney was Chairman and Chief Executive Officer of Dendreon Corporation. Dr. Henney also serves as Chairman of Oncothyreon Inc. Dr. Henney received a Ph.D. in experimental pathology from the University of Birmingham and a D.Sc. from the same university for contributions to the field of immunology. Dr. Henney serves as Chairman of Oncothyreon Inc., Chairman of Anthera Pharmaceuticals, and as Vice Chairman of Cyclacel Pharmaceuticals, Inc., formerly Xcyte Therapies, Inc. In the past five years, Dr. Henney also served as Chairman of SGX Pharmaceuticals, Inc.

Anthony Chase, has served as a director of the Company April 20, 2010. Mr. Chase's experience in leadership positions in public companies qualifies him for service as a member of the Board of Directors. Since January 2009, Mr. Chase has served as Executive Vice President of Crest Investment Company. He is also 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. He graduated with honors from Harvard College, received a law degree from Harvard Law School, and received an MBA from Harvard Business School. Mr. Chase is a member of the American Bar Association and State Bar of Texas. Mr. Chase serves as lead director of the Cornell Companies and is a director of Western Gas Partners. He is a member of the Council on Foreign Relations.

Christopher Garabedian, was nominated to serve on the Board in April 2010. Mr. Garabedian's experience serving in leadership positions within biopharmaceutical industry qualifies him to serve on the Board of Directors. Mr. Garabedian has served as Vice President of Corporate Strategy for Celgene Corporation since July 2007. From November 2005 to June 2007, Mr. Garabedian served as an independent consultant to early-stage biopharmaceutical companies. From 1997 to 1998 and from 1998 to November 2005, Mr. Garabedian worked at Gilead Sciences, Inc., 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. 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 Associates from 1991 to 1994. Mr. Garabedian received his B.S. in marketing from the University of Maryland.

Dr. Hans Wigzell, was nominated to serve on the Board in April 2010. Dr. Wigzell has been acting as Chairman of the Strategic Advisory Board of Company since August 2008. 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. Previously he was the President of the Karolinska Institute from 1995 through 2003, and he was General Director of the National Bacteriological Laboratory in Stockholm between 1987 and 1993. Dr. Wigzell is Chairman of the Board of 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; American Academy of Arts and Sciences; the Finnish Science Society; and the European Molecular Biology Organization. He holds an M.D. and Ph.D. degree from Karolinska Institute in Stockholm and, in addition to being President of 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. He received honorary doctors degrees at University "Tor Vergata" in Rome, Italy and Turku University in Finland. In the past five years, Dr. Wigzell has served as a director of Probi AB, RaySearch Laboratories AB, Biovitrum AB, and at Diamyd Medical AB.

Board of Directors Meetings and Committees

During 2009, AVI's Board of Directors held 15 meetings. During the time that they were members of the Board in 2009, each director attended at least 75% of the aggregate of the total number of meetings of the Board of Directors and the total number of meetings held by all committees of the Board of Directors on which each such director served.

The Board of Directors has a separately designated standing Audit Committee, established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934 (the "Exchange Act"), as amended. The Audit Committee conducted four meetings during the fiscal year ended December 31,

2009. As of the date hereof, the members of the Audit Committee are Mr. Hodgman, Dr. Price, and Dr. Behrens. Former director Dr. Fara also served on the Audit Committee during 2009. Dr. Fara decided not to stand for reelection in March 2009, and ceased to be a member of the Audit Committee when his term as a director expired on May 19, 2009. Mr. Hodgman serves as the Audit Committee's Chairman and the Audit Committee's designated financial expert. All members of the Audit Committee are independent directors, as defined under applicable listing requirements of the Nasdaq Stock Market. The Audit Committee oversees the annual and quarterly financial reporting process, retains and replaces the Company's independent auditors, discusses with the auditors their independence from management and reviews the scope of the independent annual audit. The Audit Committee operates under an amended and restated written charter adopted by the Board of Directors on March 30, 2004, a copy of which is posted on the Company's website (www.avibio.com). The Audit Committee reviewed and reassessed the charter for effectiveness during 2009.

The Board of Directors also has a standing Compensation Committee, which reviews and makes recommendations to the full Board of Directors regarding compensation for the Company's executive officers and directors and administers the Company's stock option and employee stock purchase plans. During the fiscal year ended December 31, 2009, the Compensation Committee held eight meetings. As of the date hereof, the members of the Compensation Committee are Mr. Casey (Chair) and Mr. Goolsbee. A copy of the Compensation Committee charter is posted on the Company's website (www.avibio.com).

The Board of Directors also has a standing Nominating and Corporate Governance Committee, which is responsible for considering and making recommendations to the Board of Directors concerning the appropriate size, functions and needs of the Board of Directors and to ensure compliance with the Company's Code of Ethics and other corporate governance policies. During the fiscal year ended December 31, 2009, the Nominating and Corporate Governance Committee held two meetings. As of the date hereof, the members of the Nominating and Corporate Governance Committee are Mr. Goolsbee (Chair), Mr. Casey, and Mr. Chase. Former director Dr. Fara also served on the Nominating and Corporate Governance Committee during 2009. Dr. Fara decided not to stand for reelection in March 2009, and ceased to be a member of the Nominating and Corporate Governance Committee when his term as a director expired on May 19, 2009. Dr. Henney served on the Nominating and Corporate Governance Committee during 2009 following his election to the Board of Directors until he stepped down effective April 20, 2010. The Nominating and Corporate Governance Committee operates under an amended and restated written charter adopted by the Board of Directors on February 16, 2006, a copy of which is posted on the Company's website (www.avibio.com).

Director Diversity and Qualification Standards

The Board believes that the Board, as a whole, should possess a combination of skills, professional experience, and diversity of backgrounds necessary to oversee the Company's business. In addition, the Board 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 the Company's current and future needs.

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 the Company's business, independence, judgment and integrity, the ability to commit sufficient time and attention to Board activities, and any potential conflicts with the Company's business and interests. In addition, the Board and the 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 the Company's 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 Committee to update the skills and experience they seek in the Board as a whole, and in individual directors, as the Company's 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 it believes the Company should seek in order to constitute a balanced and effective board.

The members of the Audit, Nominating and Corporate Governance, and Compensation Committees are independent as defined under applicable listing requirements of the Nasdaq Stock Market, and all members of the Audit Committee have the requisite financial experience.

Although we do not have a formal policy regarding attendance by members of the Board of Directors at our annual meetings of shareholders, directors are encouraged to attend the annual meetings. All directors other than Dr. Henney attended the Company's 2009 annual meeting of shareholders.

Leadership Structure of Board of Directors

Currently, the Company's current Interim President and Chief Executive Officer, David Boyle, does not serve as a director. Throughout 2008 and 2009, the Company's Chief Executive Officer, Dr. Leslie Hudson, served as a director but not as its Chairman of the Board. The Chief Executive Officer is responsible for setting the strategic direction for the Company and the day-to-day leadership and performance of the Company, while the Chairman of the Board provides guidance to the Chief Executive Officer and sets the agenda for Board meetings and presides over meetings of the Board. The Company's Chief Executive Officer also was not and the Company's Interim Chief Executive Officer is not a member of any of the standing committees of the Board of Directors. The Board believes that this leadership structure is appropriate because it allows the Company to speak externally to its various constituents, as well as internally to its officers and employees, on a unified and consistent basis, and fosters clear accountability and effective decision-making. At the same time, the Company's Board structure incorporates appropriate Board independence and programs for risk management oversight of the Company's overall operations, including its compensation programs. It is not certain at this time whether the Company's permanent Chief Executive Officer will become a member of the Board but if he/she does become such a member, the Company expects that he or she will not be the Chairman and will not be a member of any Board committee.

The Company has been, and continues to be, a strong advocate of Board independence and has put into place measures to see that its directors provide independent oversight. The Board believes that it also has established substantial independent oversight of management. For example, all of the Company's current directors, as well as the director nominees identified in this Proxy Statement, are independent under the Nasdaq guidelines. In addition, each of the Board's three standing committees, Audit, Compensation and Nominating and Corporate Governance, are comprised solely of independent directors. Each of the standing committees operates under a written charter adopted by the Board. Also, the Company's non-management directors meet in executive session periodically without management in attendance. This means that oversight of critical matters, such as the integrity of the Company's financial statements, employee compensation, including compensation of the executive officers, the selection of directors and the evaluation of the Board and key committees is entrusted to independent directors.

Role of Board of Directors in Risk Oversight

The Board and each of its standing committees (Audit, Compensation, and Nominating and Corporate Governance) oversee the management of risks inherent in the operation of the Company's business. The Board has delegated certain risk management responsibilities to the Board committees. The Board and the Audit Committee evaluate Company policies with respect to risk assessment and risk management, and monitor the Company's 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 and the Governance and Nominating Committee monitor the Company's 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 the Company's executive compensation program and the associated incentives to determine whether they present a significant risk to the Company. The Compensation Committee has concluded, based on its reviews and analysis of the Company's compensation policies and procedures, that such policies and procedures are not reasonably likely to have a material adverse effect on the Company.

Code of Business Conduct and Ethics

The Company has adopted a Code of Business Conduct and Ethics (the "Code"). The Code 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. The Company has contracted with Ethicspoint to provide a method for employees and others to report violations of the Code anonymously. A copy of the Code is posted on the Company's website (www.avibio.com).

Communications to the Board of Directors

The Board of Directors welcomes and encourages shareholders to share their thoughts regarding the 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, the Company's preference is that shareholders communicate with the Board of Directors in compliance with its communications policy. The Company's communications policy, as adopted by the Board of Directors, provides that all communications should first be directed to the Company's Investor Relations Department. Investor Relations will then distribute a copy of the communication to the Chairman of the Board, the Chairman of the Audit Committee and the Company's outside counsel. Based on the input and decision of these persons, along with the entire Board of Directors if it is deemed necessary, the Company, through its Investor Relations Department, will respond to the communication.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires AVI's directors and officers, and persons who own more than ten percent (10%) of a registered class of AVI's equity securities, to file initial reports of ownership and report of changes in ownership with the Securities and Exchange Commission ("SEC"). Such persons also are required to furnish AVI with copies of all Section 16(a) reports they file.

Based solely on its review of the copies of such reports received by it with respect to fiscal year 2009, or written representations from certain reporting persons, AVI believes that all filing

requirements applicable to its directors, officers and persons who own more than ten percent (10%) of a registered class of AVI's equity securities have been complied with for fiscal 2009.

Compensation Committee Interlocks and Insider Participation

As of December 31, 2009, the Compensation Committee was composed of three directors, namely, Mr. Casey, Mr. Forrest and Mr. Goolsbee. Prior to his appointment as the Company's Interim Chief Executive Officer, Mr. Forrest served on the Company's Compensation Committee. On March 27, 2007, in connection with his appointment as the Company's Interim Chief Executive Officer, Mr. Forrest resigned as a member of the Compensation Committee and Mr. Casey was appointed as his replacement. On March 10, 2008, having completed his tenure as the Company's Interim Chief Executive Officer, Mr. Forrest was again appointed to the Compensation Committee. There were no employee directors on the Compensation Committee and no interlocks.

COMPENSATION POLICIES, PRACTICES, RISKS AND RELATED ISSUES

Overview

The Company is a biopharmaceutical company developing products in the growing field of RNA therapeutics. Current applications of the Company's technology platform include clinical trials for genetic diseases (Duchenne muscular dystrophy), and earlier programs in infectious diseases (Ebola and Marburg viruses), H1N1 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 Company intends that total compensation and each of its components, including base salary, incentive cash compensation, equity compensation, benefits and perquisites be competitive in the marketplace for suitable talent and in accord with the Company's short and long term goals. We seek to attract, retain, develop and reward employees whose performance helps the Company to achieve such goals and to provide value to our shareholders. While base compensation, benefits and perquisites are primarily a factor of being competitive in the marketplace for employees, incentive compensation is primarily merit based, with actual compensation a function of the achievement of defined and agreed corporate and individual goals. Towards this end:

- 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 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;
- Most incentive plans (including the plans covering our executive officers) include a threshold, target and maximum payment. The threshold ensures that if goal achievement is not at a minimum level, no payments will be made. The maximum ensure that payments do not exceed a certain level, keeping the compensation mix within certain ranges and limiting excessive payments under any one element;

- 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 the 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 Committee and 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 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;
- The Company's 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 units and stock option grants. Vesting requirements of typically three 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.

In mid-2009, the Committee retained the services of a compensation consultant, Frederick W. Cook & Co., Inc. ("FW Cook") to assist the Committee in its evaluation of certain aspects of executive compensation for 2009 and 2010 including base compensation, incentive cash compensation and equity compensation. The Compensation Committee has the independent authority to approve the fees and other retention terms with respect to such a compensation consultant. The Compensation Committee also has the authority, as necessary and appropriate, to consult with other outside advisors to assist in its duties to the Company.

EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Introduction

Throughout this section of the Proxy Statement, the individuals who served as the Company's Chief Executive Officer and Chief Financial Officer during fiscal year 2009, as well as the other individuals included in the Summary Compensation Table in this Proxy Statement, are referred to as the "named executive officers."

Overview

In 2008 and 2009, the Company had several significant changes to its management team. One result of these new recruits is that certain elements of the compensation package for certain of the named executive officers were established as a result of arms-length negotiations between the Company and the individuals the Company was recruiting to join the Company at its facility in Bothell, Washington. Thus, in some cases, the base compensation and benefits packages for our named executive officers reflect market forces rather than benchmarking and other tools often used by compensation consultants. In the final analysis, however, there was no material difference between negotiated compensation packages and the benchmarks preferred by the compensation consultant.

Other noteworthy aspects of the Company's compensation program include:

- Base salaries for all named executives have increased 2% - 3% in 2010 compared to 2009;
- The named executive officers, as a group, achieved approximately 63% of the 2009 Company-wide corporate performance goals and, on average 64% of the individual goals set for them in 2009; the bonuses for Mr. Medeiros were determined in accordance with the terms of his employment contract entered into upon the commencement of his employment in 2009;
- The 2009 bonuses, which were paid in 2010 represent in the aggregate approximately 13% of the total compensation paid to the named executive officers;
- The bonus for the Company's Chief Executive officer is 100% dependent on achievement of Company-wide performance goals established by the Board and Compensation Committee and the bonus for the other named executive officers is 70% dependent on such Company-wide goals and 30% dependent on achievement of individual performance goals established by the Chief Executive Officer in consultation with the Compensation Committee;
- The Compensation Committee and the Board has established Company-wide performance goals for the named executive officers, including the Chief Executive Officer, for 2010 and the Chief Executive Officer, in consultation with the Compensation Committee, has established individual performance goals for 2010 for the named executive officers. If achieved at the 100% level, these bonuses would represent in the aggregate approximately 36% of the anticipated total compensation in 2010 for the named executive officers;
- The Compensation Committee and the Board believe that the performance goals for 2010, like those for 2009, provide appropriate incentives to the named executive officers to align their personal financial interests with the short and long term goals of the Company without promoting inappropriate risk-taking behavior; and
- The Compensation Committee believes a mixture of base cash compensation, performance- based bonuses, equity incentive compensation in the form of options and restricted shares and a fair package of health care and similar benefits is appropriate for the Company and is in the best interests of the Company's shareholders.

Significant Management Changes in Fiscal Year 2009

In 2009, the Company underwent several senior management changes, including hiring Stephen B. Shrewsbury as the Company's Chief Medical Officer and Senior Vice President of Preclinical, Clinical and Regulatory Affairs, and Paul Medeiros as the Company's Senior Vice President of Business Development and Chief Business Officer.

The Compensation Committee

The Company's executive compensation program is administered by the Company's Compensation Committee. As of December 31, 2009, the Compensation Committee was composed of three directors: K. Michael Forrest, William Goolsbee, and Michael Casey (Chair). During 2009, all members of the Compensation Committee were "independent" for purposes of applicable securities and regulatory requirements. Although Mr. Forrest acted as the Company's Interim Chief Executive Officer until February 8, 2008, under applicable Nasdaq listing requirements 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 has concluded that Mr. Forrest is independent in accordance with these applicable listing requirements. Additionally, the Board feels that his presence on, and participation in

the discussion of, the Committee is in the best interests of the Company due to his prior experience with the management of the Company and experience as a director in public and private companies.

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 the Company's Chief Executive Officer to establish individual performance goals for each of the other named executive officers. This responsibility includes, among other things: (a) 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; (b) 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; (c) making recommendations to the Board of Directors with respect to new cash-based incentive compensation plans and equity-based compensation plans; and (d) preparing an annual report of the Compensation Committee.

The Compensation Committee has independent authority to make compensation decisions for our named executive officers. The Compensation Committee seeks ratification from the Company's Board of Directors of its decisions regarding the compensation of the Chief Executive Officer.

Compensation Philosophy and Objectives

The purpose of the Company's executive compensation program is and has been to attract, motivate, recognize, reward and retain key executive employees in order to promote the success of the Company. The Company seeks, and has sought, to reward and to provide incentives to named executive officers, including the Chief Executive Officer, for their performance and delivery against agreed goals. Over the past few years, the Company has seen significantly increased demand for executives with industry-specific skills and experience and a highly competitive market for such executives. Additionally, given the small size of the Company relative to certain other members of our industry sector and the fact that there was a significant doubt about the Company's ability to secure the funding needed to continue our research and development programs at the time when certain changes in management were made, in 2009 we faced significant challenges in recruiting senior members of our management team. Therefore, in 2009 (and we expect in 2010 and beyond) the attraction and retention of executives was, and will be, one of the key purposes of the Company's executive compensation program.

The Company's executive compensation program also includes a pay-for-performance component. In that respect, the compensation program is designed to reward the named executive officers, including the Chief Executive Officer, for meeting specific goals that are established and reviewed by the Compensation Committee for each named executive officer and for the Company as a whole. In 2009, the Committee, Board and the Chief Executive Officer agreed and set performance goals for each named executive officer and the Company as a whole. Following the completion of such fiscal year, the Chief Executive Officer and the Compensation Committee 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 the Chief Executive Officer's performance. The Compensation Committee has established similar goals for 2010.

The at-risk component of the compensation package for each named executive officer, which includes a targeted cash bonus and stock options/restricted stock, is determined in large part on the basis of how that named executive officer performed in meeting his or her goals and recommendations from the Committee's compensation consultant. Compensation decisions are also based on market factors that require the Company to remain competitive in its 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 2009 in fulfilling its roles and responsibilities:

- Compensation levels and opportunities should be sufficiently competitive to facilitate recruitment and retention of experienced executives in the Company's highly competitive talent market;
- Compensation should reinforce the Company's 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 to the Company 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.

Role of Executive Officers in Compensation Decisions

Our Chief Executive Officer plays a pivotal role in determining executive compensation. No less than annually, the Company's 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 the compensation of our Chief Executive Officer, the Compensation Committee meets without the Chief Executive Officer to discuss its recommendation and makes a recommendation to the full Board of Directors.

Use of Compensation Consultants and Reports

In establishing compensation for 2010, the Compensation Committee did retain a compensation consultant. In August 2009 FW Cook presented its assessment and recommendations to the Compensation Committee. Based in part on such assessment and recommendations, the Compensation Committee established for the named executive officer and with respect to the Company's Chief Executive Officer recommended to the Board of Directors that each of the Chief Executive Officer and the named executive officers receive an increase in base salary and be granted additional options to acquire shares of the Company's common stock. The bonuses for Mr. Medeiros were established and paid in accordance with the terms of his contract entered into when he was hired in 2009 and the increase in his base compensation for 2010 took effect on January 1, 2010.

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 the Company's local geographic area, the satisfaction of (or failure to satisfy) previously-developed performance measurements for the named

executive officer and the Company, and the total vested and unvested equity grants owned by the executive. The Company competes 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 the Company's named executive officers, combining both short-term and long-term incentives, some of which are at risk based on individual and Company 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 the Company's 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 the Company's shareholders.

Performance Factors in 2009

The Compensation Committee, together with the Chief Executive Officer and full Board of Directors, establishes performance criteria for the named executive officers (other than Paul Medeiros), both in terms of individual performance and the performance of the Company as a whole, and generally assigns a weight to the performance goals. Mr. Medeiros' bonus was determined in accordance with his employment agreement, which did not establish any performance goals for 2009.

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 fiscal year 2009:

<u>Goal</u>	<u>Assigned Weight</u>	<u>Achieved Weight</u>
Develop approved operational and other administrative plans and budget for 2009	20%	16.5%
		(included within goal was to manage expense and revenue goals to achieve an overall 2009 cash burn not to exceed \$11.5 million; actual cash burn was \$10.8 million)
Attain certain preclinical and clinical development milestones	40%	23.5%
Complete certain key business development partnerships, including partnerships relating to collaboration on drug research and development and to commercialization of certain products under development	15%	6.5%
Advance core discovery research projects	5%	2.5%
Reorganize certain elements of the Company's business	20%	5%
Additional significant value adding accomplishments relating to obtaining additional financing for the Company and to securing the award of certain government contracts to the Company	0%	9%
Total	100%	63%

Dr. Hudson's performance bonus was based entirely on the Company's achievement of the corporate goals outlined above. The performance bonus of each other named executive officer was based on the Company's 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:

J. David Boyle II, Chief Financial Officer

<u>Goal</u>	<u>Assigned Weight</u>	<u>Achieved weight</u>
Secure funding through to NDA for at least two biodefense projects	35%	5%
Manage expense, revenue and budget goals to achieve prescribed financial targets (including achievement of overall cash burn of not more than \$11.5 million)	10%	8%
Restructure certain elements of the Company's agreement with a key business partner, including restructuring certain financial components of the agreement	25%	23%
Enhance general and administrative support for AVI, including establishing the Company's new headquarters	30%	25%
Additional significant value adding accomplishments, including leadership in connection with efforts to obtain additional financing for the Company	0%	5%
Total	100%	66%

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

<u>Goal</u>	<u>Assigned Weight</u>	<u>Achieved weight</u>
Achieve certain goals with respect to clinical development and regulatory affairs, including analyzing and submitting certain data for publication in a peer reviewed journal and completing certain two phase 1 drug trials	70%	43%
Achieve certain goals with respect to preclinical development	30%	22.5%
Total	100%	65.5%

Patrick L. Iversen, Senior Vice President of Strategic Alliances

<u>Goal</u>	<u>Assigned Weight</u>	<u>Achieved weight</u>
Secure funding through to NDA for at least two biodefense projects	25%	5%
Complete animal studies for certain drug candidates	20%	20%
Achieve prescribed goals with respect to preclinical development	45%	30%
Achieve prescribed goals with respect to ongoing drug research projects	10%	5%
Additional significant value adding accomplishments relating to internal strategic reviews	0%	5%
Total	100%	65%

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

The bonuses paid to Mr. Medeiros were according to provisions in his employment agreement and were not performance based.

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, 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 the Company's 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 the strategic direction of the Company, 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 the Company's primary priorities is to retain its executives, the Company seeks to ensure its named executive officers receive a base salary reflective of the Company's size and the marketplace in which it competes.

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 the Company gives executives greater levels of responsibility. As the Company believes that many of its named executive officers could command higher salaries in similar roles with larger companies, including with the Company's competitors, the Company's 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 the fiscal year ended December 31, 2009, the principal components of compensation for named executive officers were identical to the components in the prior fiscal year, and included:

- Base salary;
- Performance-based cash bonuses;
- Equity Incentive Plan;
- Employee Stock Purchase Plan;
- 401(k) Plan; and
- Other benefits.

Base Salaries. As a general proposition, the base salaries of the Company's 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 other executives in the Company, and internal comparability considerations. As noted above, however, in 2009 some of the initial compensation packages for our named executive officers were determined far more as a result of negotiations between the Company and these individuals in connection with their recruitment to the Company rather than abstract compensation data.

As noted previously, the Chief Executive Officer and each of the named executive officer received a 3% (annualized) increase in base compensation for 2010.

Consistent with the philosophy and events discussed above, the base salary levels for fiscal year 2008 and fiscal year 2009 for our named executive officers were as follows:

Name	Title	2009 Base Salary	2008 Base Salary	% Change 2008 to 2009 Base Salary
Leslie Hudson, Ph.D.	President and Chief Executive Officer	\$ 480,000	\$ 480,000	0%
J. David Boyle II	Chief Financial Officer and Secretary	\$ 324,000	\$ 324,000	0%
Patrick L. Iversen, Ph.D.	Senior Vice President of Strategic Alliances	\$ 265,000	\$ 265,000	0%
Paul Medeiros	Senior Vice President of Business Development and Chief Business Officer	\$ 315,000	N/A	N/A
Stephen B. Shrewsbury, M.D.	Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer	\$ 310,000	N/A	N/A

Performance-Based Cash Bonuses/Equity Awards. The Company typically grants cash bonuses to executive officers as part of their annual overall compensation. In 2009, 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. For the Chief Executive Officer, the target was 60% of his base compensation. Such cash bonuses are in recognition of achievement of performance milestones for the individual named executive officers and of milestones achieved by the Company as a whole. The Compensation Committee takes into account the Company's cash resources and the need of the Company to deploy those resources to advance its business plan, and assesses this objective against the need to maintain compensation levels that are competitive within the biotechnology industry.

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 2009. In early 2010, the Compensation Committee and the Board determined that 63% of the corporate goals had been obtained and Dr. Hudson determined that the other named executive officers had achieved the percentage of individual goals identified above. In 2009, the Compensation Committee and the Board accepted the offer of the named executive officers, including Dr. Hudson, to have their 2008 bonuses paid in the form of shares of stock issued under the Company's 2002 Equity Incentive Plan rather than cash, taking into account the tax impact of accepting stock rather than cash as payment of such bonuses. The following table shows for each of our named executive officers the

aggregate dollar value of the stock awards for fiscal year 2008 granted in February 2009 and the cash bonuses awarded for fiscal year 2009 in February 2010:

Name	Title	2009 Bonus	2008 Bonus	% Change (2008 to 2009)	2009 Bonus as a % of 2009 Base Salary
Leslie Hudson, Ph.D.	President and Chief Executive Officer	\$ 181,440	\$ 196,020(1)	(7)%	38%
J. David Boyle II	Chief Financial Officer and Secretary	\$ 62,111	\$ 72,973(2)	(15)%	19%
Patrick L. Iversen, Ph.D.	Senior Vice President of Strategic Alliances	\$ 42,135	\$ 49,737(3)	(15)%	16%
Paul Medeiros	Senior Vice President of Business Development and Chief Business Officer	\$ 150,000	N/A	N/A	N/A
Stephen B. Shrewsbury, M.D.	Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer	\$ 59,288	N/A	N/A	N/A

- (1) Represents the aggregate value of 213,065 shares at \$0.92 per share, which was the closing price for the Company's Common Stock on February 10, 2009, the date which such bonus was paid.
- (2) Represents the aggregate value of 79,318 shares at \$0.92 per share, which was the closing price for the Company's Common Stock on February 10, 2009, the date which such bonus was paid.
- (3) Represents the aggregate value of 54,062 shares at \$0.92 per share, which was the closing price for the Company's Common Stock on February 10, 2009, the date which such bonus was paid.

Equity Incentive Plan Compensation. The long-term compensation of named executive officers takes the form of stock option awards under the Company's 2002 Equity Incentive Plan, or "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 Compensation Committee believes that equity-based compensation helps ensure that the Company's named executive officers have a continuing stake in the long-term success of the Company, and preserves the Company's cash resources. The 2002 Plan provides incentives to continue in the service of the Company and to create in such executives a more direct interest in the future success of the operations of the Company by relating incentive compensation to the achievement of long-term corporate economic objectives. All options granted by the Company have been granted with an exercise price equal to the closing market price of the Company's Common Stock on the date of grant and, accordingly, will only have value if the Company's 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 the 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. The 2002 Plan is administered by the Compensation Committee.

The following table shows the stock options granted to named executive officers in fiscal year 2008 and fiscal year 2009:

Name	Title	FY 2009 Shares Subject to Option Grant	FY 2008 Shares Subject to Option Grant	% Increase / (Decrease) 2008 to 2009
Leslie Hudson, Ph.D.	President and Chief Executive Officer	350,000	667,000	(48)%
J. David Boyle II	Chief Financial Officer and Secretary	150,000	500,000	(70)%
Patrick L. Iversen, Ph.D.	Senior Vice President of Strategic Alliances	100,000	75,000	33%
Paul Medeiros	Senior Vice President of Business Development and Chief Business Officer	400,000	N/A	N/A
Stephen B. Shrewsbury, M.D.	Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer	450,000	N/A	N/A

Employee Stock Purchase Plan. The purpose of the Employee Stock Purchase Plan, or "ESPP," is to attract and retain qualified employees essential to the success of the Company and, like the 2002 Plan, to provide such persons with an incentive to perform in the best interests of the Company. The ESPP is administered by the Compensation Committee, which has the power to make and interpret all rules and regulations it deems necessary to administer the ESPP and has broad authority to amend the ESPP, subject to certain amendments requiring shareholder approval. All employees of the Company and its subsidiaries, including the Company's named executive officers, may participate in the ESPP if they: (i) are employed in a position with regular hours of 20 or more hours a week and (ii) are employed more than five months in any calendar year. Eligible employees may elect to contribute from 1% to 10% of their cash compensation during each pay period. The ESPP provides for two annual six-month offering periods, beginning on May 1 and November 1 each year (the "Enrollment Dates"). During the offering periods, participants accumulate funds in an account through payroll deduction. At the end of each six-month offering period, the purchase price is determined and the accumulated funds are used to automatically purchase shares of Common Stock from the Company. The purchase price per share is equal to 85% of the lower of the fair market value of the Common Stock (i) on the beginning date of the offering period or (ii) the end of the Offering Period. Unless a participant files a withdrawal notice before the beginning of the next offering period, such participant will automatically be re-enrolled for the next offering period. Beginning on January 1, 2006, the Company began accounting for stock issued under the ESPP in accordance with the requirements of FASB ASC Topic 718.

In 2009, 124,213 shares of Common Stock were purchased under the ESPP, all of which were purchased by persons other than our named executive officers. In November 2009, all shares of common stock available under the ESPP were issued and the Compensation Committee decided not to renew the ESPP.

401(k) Plan. The Company's 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 was created 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 the discretion of the

Company, participants may receive a match on the first 4% of compensation that the participant contributes to the 401(k) Plan. As of the fiscal year ended December 31, 2009, 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

A significant portion of the compensation paid to the Company's named executive officers is considered "performance-based compensation" for purposes of Section 162(m) of the Internal Revenue Code and, therefore, is fully deductible by the Company for federal income tax purposes. 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 FASB ASC Topic 718. The Company views preserving tax deductibility as an important objective, but not the sole objective, in establishing executive compensation. In specific instances the Company has and in the future will authorize compensation arrangements that are not fully tax deductible but which promote other important objectives of the Company.

Repricing of Stock Options

The Company did not reprice any stock options in 2009.

Employment Agreements with Named Executive Officers Entered into by the Company in 2009

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

On January 26, 2009, the Company hired Stephen Bevan Shrewsbury, M.D., as the Company's Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer. In connection with his hiring, the Company and Dr. Shrewsbury entered into an Employment Agreement dated January 26, 2009 providing for Dr. Shrewsbury's at will employment by the Company. Under the terms of the 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, the Company's Chief Executive Officer, and the Compensation Committee.

In connection with his employment as the Company's Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer, the Company granted to Dr. Shrewsbury options to purchase 450,000 shares of the Company's common stock under the Company's 2002 Plan, with an exercise price equal to the fair market value of the Company's 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 the Company granted to Dr. Shrewsbury 60,000 restricted shares of the Company's common stock. The shares became fully vested as of July 27, 2009. The Company is also required to reimburse Dr. Shrewsbury for all expenses reasonably incurred by him in discharging his duties for the Company.

In addition to the compensation described above, under the Employment Agreement Dr. Shrewsbury is entitled to receive (i) reimbursement of up to \$100,000 for reasonable expenses incurred in 2008 for reasonable expenses incurred in 2008 to relocate Dr. Shrewsbury to the city of the Company's 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 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. The Employment Agreement further provides that Dr. Shrewsbury is entitled to receive certain tax gross-up payments.

The Employment Agreement provides that, following Dr. Shrewsbury's termination of employment with the Company, Dr. Shrewsbury may not engage in certain activities in competition with the Company's 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 the Company from recruiting, hiring, or assisting a third party in hiring any person then employed by the Company.

Dr. Shrewsbury may voluntarily terminate his employment after giving the Company 60 days' notice. The Company may terminate Dr. Shrewsbury's employment without "Cause" (as defined in the Employment Agreement) upon 30 days' written notice. Dr. Shrewsbury's employment is also terminated upon death, disability, or upon the effective date of a notice sent by the Company to Dr. Shrewsbury terminating him for Cause.

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

Effective May 19, 2009, the Company hired Paul Medeiros as the Company's Senior Vice President of Business Development and Chief Business Officer. In connection with his hiring, the Company and Mr. Medeiros entered into an Employment Agreement dated May 19, 2009 providing for Mr. Medeiros's at will employment by the Company. 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 the Company's Chief Executive Officer, the Company's Compensation Committee and Mr. Medeiros. Mr. Medeiros's Employment Agreement provided for a guaranteed bonus of at least \$50,000 for fiscal year 2009.

In connection with his employment as the Company's Senior Vice President of Business Development and Chief Business Officer, the Company granted to Mr. Medeiros options to purchase 400,000 shares of the Company's common stock under the Company's 2002 Plan, with an exercise price equal to the fair market value of the Company's 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 the Company granted to Mr. Medeiros 100,000 restricted shares of the Company's common stock, which will vest on a pro rata basis through the first anniversary of Mr. Medeiros's employment, subject to certain performance-based criteria. As of the date hereof, the performance criterion has not been achieved and the Company believes the achievement thereof is unlikely.

In addition to his base compensation for 2009, the Company agreed to pay Mr. Medeiros a \$100,000 sign-on bonus. In the event that Mr. Medeiros separates from the Company prior to his one-year anniversary with the Company for reasons of (i) termination of Mr. Medeiros by the Company for "Cause" (as defined in the Employment Agreement) or (ii) voluntary termination by Mr. Medeiros other than for "Good Reason" (as defined in the Employment Agreement), the sign-on bonus is completely refundable to the Company. The Company is also required to reimburse Mr. Medeiros for all expenses reasonably incurred by him in discharging his duties for the Company.

In addition to the compensation described above, under the 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 the Company's

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.

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

Mr. Medeiros may voluntarily terminate his employment after giving the Company 60 days' notice. The Company may terminate Mr. Medeiros's employment without "Cause" (as defined in the Employment Agreement) upon 30 days' written notice. Mr. Medeiros's employment is also terminated upon death, disability, or upon the effective date of a notice sent by the Company to Mr. Medeiros terminating him for Cause.

Employment Agreements with Named Executive Officers Entered into by the Company in 2008

Leslie Hudson, Ph.D.—Chief Executive Officer

On February 8, 2008, the Board of Directors appointed Leslie Hudson, Ph.D. as the Company's Chief Executive Officer. In connection with his appointment, the Company and Dr. Hudson entered into an Employment Agreement providing for Dr. Hudson's at will employment by the Company. Under the terms of the Employment Agreement, Dr. Hudson is entitled to an initial annual salary of \$480,000, which amount is subject to review for potential increase, but not decrease, on an annual basis. In addition to his base salary, Dr. Hudson is entitled to an annual bonus based upon the Company's and Dr. Hudson's achievement of performance objectives established by the Company's 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 is high relative to the compensation payable to other executive officers of the Company, including the Company's Interim Chief Executive Officer who served between March 2007 and February 2008. The Radford Survey showed that Dr. Hudson's base compensation was in excess of the Company's targeted 60th percentile. In determining Dr. Hudson's compensation, the Board of Directors took into account, among other things, the fact that Dr. Hudson would be required to relocate from his home in New Jersey, Dr. Hudson's extensive experience in the Company's industry, and the salaries and potential bonuses commanded by principal executive officers at other companies in the Company's industry.

In connection with his employment as the Company's Chief Executive Officer, the Company granted to Dr. Hudson options to purchase 667,000 shares of the Company's common stock under the Company's 2002 Plan, with an exercise price equal to the fair market value of the Company's common stock on February 8, 2008, which was \$1.09 per share. Subject to certain exceptions, the options vest in equal annual installments over a period of four years. In addition, on that same date the Company granted to Dr. Hudson 333,000 restricted shares of the Company's common stock. A portion of the shares of common stock are 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. The Company is also required to reimburse Dr. Hudson for all expenses reasonably incurred by him in discharging his duties for the Company.

In addition to the compensation described above, under the Employment Agreement Dr. Hudson is entitled 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 the Employment Agreement, (iii) a monthly living allowance of up to \$4,500 until October 1, 2010, (iv) a car allowance of \$1,000 per month and airfare for one round trip per week between his home and the Company's 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, the Company is required to provide Dr. Hudson with the Company's 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. The Employment Agreement further provides that Dr. Hudson is entitled to receive certain tax gross-up payments. In 2008-09, in accordance with his Employment Agreement, he received 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 and reimbursement of \$25,000 in legal fees incurred by Dr. Hudson in connection with the negotiation of the Employment Agreement.

The Employment Agreement provides that, for a period of two years following Dr. Hudson's termination of employment with the Company, Dr. Hudson may not engage in certain activities in competition with the Company's business activities, to the extent those competitive activities relate to five competitors specified by the Company prior to Dr. Hudson's termination. Dr. Hudson is further prohibited, for a period of two years following termination of employment with the Company, from recruiting, hiring, or assisting a third party in hiring any person then employed by the Company.

After 2009, Dr. Hudson's Employment Agreement provides that Dr. Hudson may voluntarily terminate his employment with the Company, with or without "Good Reason" (as defined in the Employment Agreement), upon not less than 30 days. The Company may terminate Dr. Hudson's employment without "Cause" (as defined in the Employment Agreement) and other than in connection with a "Change in Control" (as defined in the Employment Agreement) upon 30 days' written notice. Dr. Hudson's employment is terminated upon death, disability, or upon the effective date of a notice sent by the Company to Dr. Hudson terminating him for Cause. Effective April 20, 2010, Dr. Hudson resigned at the request of the Board of Directors, which resignation is being treated as a termination without Cause (as defined in the Employment Agreement). See note 12 (Subsequent Events) to the financial statements filed on Form 10-K/A filed with the SEC on April 28, 2010.

J. David Boyle II—Chief Financial Officer

On August 18, 2008, the Company hired J. David Boyle II as the Company's Chief Financial Officer. In connection with his appointment, the Company and Mr. Boyle entered into an Employment Agreement dated July 24, 2008 providing for Mr. Boyle's at will employment by the Company. Under the terms of the Employment Agreement, 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, the Company's Chief Executive Officer, and the Compensation Committee. As noted above,

Mr. Boyle received a bonus of \$62,111 (or approximately 20%) for his total cash compensation in connection with his services in 2009.

In connection with his employment as the Company's Chief Financial Officer, the Company granted to Mr. Boyle options to purchase 350,000 shares of the Company's common stock under the Company's 2002 Plan, with an exercise price equal to the fair market value of the Company's 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 the Company granted to Mr. Boyle options to purchase an additional 150,000 shares of the Company's common stock under the Company's 2002 Plan, with an exercise price equal to the fair market value of the Company's common stock on August 18, 2008, which was \$1.21 per share. The vesting of these 150,000 shares is subject to the Company's achievement of certain milestones, which the Company has not achieved and will not achieve. The Company is also required to reimburse Mr. Boyle for all expenses reasonably incurred by him in discharging his duties for the Company.

In addition to the compensation described above, under the Employment Agreement Mr. Boyle is entitled to receive (i) reimbursement of up to \$100,000 for reasonable expenses incurred in 2008 for reasonable expenses incurred to relocate Mr. Boyle, his spouse and certain members of his family to the city of the Company's 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 the 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. The Employment Agreement further provides that Mr. Boyle is entitled to receive certain tax gross-up payments.

The Employment Agreement provides that, following Mr. Boyle's termination of employment with the Company, Mr. Boyle may not engage in certain activities in competition with the Company's 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 the Company from recruiting, hiring, or assisting a third party in hiring any person then employed by the Company.

Mr. Boyle may voluntarily terminate his employment after giving the Company sixty days' notice, and the Company may terminate Mr. Boyle's employment without Cause (as defined in the Employment Agreement) upon thirty days' written notice. Mr. Boyle's employment is also terminated upon death, disability, or upon the effective date of a notice sent by the Company to Mr. Boyle terminating him for Cause.

Effective April 20, 2010, Mr. Boyle was appointed the Company's Interim Chief Executive Officer and President. As a result of this appointment, Mr. Boyle's salary has been increased by \$3,000 per month while serving as the Interim Chief Executive Officer and President, his bonus target percentage for 2010 has been increased to forty percent (40%), and he has been granted a fully vested option on April 20, 2010 to acquire 50,000 shares of the Company's common stock at an exercise price of \$1.24.

Employment Agreements with Other Named Executive Officers in Prior Years

The Company has entered into employment contracts with each of its other named executive officers that provide for a base annual compensation. The employment contracts are cancelable by the employee on sixty days' notice and by the Company on thirty days' notice or for Cause. Cause is defined in the employment agreement as the named executive officer's willful or repeated failure to comply with the Company's policies, standards or regulations, or the named executive officer engages in conduct that is dishonest, fraudulent or detrimental to the Company. The employment agreements

provide that the named executive officers may not compete with the Company or solicit the employment of other individuals employed by the Company during their employment and for a period of two years thereafter. Under the employment agreements, the named executive officers may not disclose the Company's confidential information to outsiders during employment and for a period of two years thereafter and must assign inventions conceived by them to the Company. The respective employment agreements provide that each named executive officer is entitled to severance benefits and change in control payments in certain circumstances, as discussed below under "Post-Employment Benefits and Change in Control Arrangements."

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

The Company does not generally provide special post-employment benefits to its named executive officers, other than those available to its employees generally. However, the Company has entered into agreements with certain named executive officers relating to post-employment benefits and change in control arrangements.

Chief Executive Officer

Upon Dr. Hudson's voluntary termination of employment (other than with Good Reason) or termination of his employment for Cause, the Company must pay to him all base compensation, unpaid reimbursements, gross-up payments, and other unpaid expenses due through the effective date of termination, and any unused vacation accrued according to the Company's policies. However, Dr. Hudson would not be entitled to any other compensation, including the right to receive any bonus relating to the year in which such termination is effective.

Upon Dr. Hudson's death or "Disability" (as defined in the Employment Agreement), the Company must pay to his estate all base compensation, earned but unpaid bonuses, unpaid reimbursements, gross-up payments and other unpaid expenses due at the date of death, plus a continuation of base compensation and benefits at the rate set forth in the Employment Agreement for six months following the end of the month in which the death occurs. Dr. Hudson's estate will also have six months to exercise all vested stock options.

Upon termination of Dr. Hudson's employment by the Company without Cause or by Dr. Hudson for Good Reason where no Change of Control has occurred, the Company is 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. If termination occurs before February 8, 2010, fifty percent of unvested options and fifty percent of unvested shares of common stock granted pursuant to the Employment Agreement will immediately become fully vested and exercisable. If termination occurs on or after February 8, 2010, 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 the Company's 2002 Equity Incentive Plan will be the earlier of their original expiration date or six months from the effective date of termination.

Upon a termination of Dr. Hudson's employment by the Company without Cause or by Dr. Hudson for Good Reason that occurs within twelve months of a Change of Control, the Company is required to pay to Dr. Hudson (i) all base compensation, 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 times the target annual bonus at the

effective time of termination, and (z) two times the then current annual cost of health benefits, car allowance, expenses incurred in connection with tax preparation and investment advice, and continued participation in benefits available to other senior executives generally, as well as the amount of remaining living allowance payments. In addition, all unvested options and all shares of common stock granted pursuant to the Employment Agreement would immediately become fully vested and exercisable and all options exercisable for a period of the earlier of their original expiration date or six months from the effective day of termination.

Effective April 20, 2010, Dr. Hudson resigned at the request of the Board of Directors, which resignation is being treated as a termination without Cause (as defined in the Employment Agreement). Accordingly, Dr. Hudson received in substantial measure the severance benefits set forth above. See note 12 (Subsequent Events) to the financial statements filed on Form 10-K/A filed with the SEC on April 28, 2010.

Chief Financial Officer

Upon Mr. Boyle's voluntary termination of employment (other than with Good Reason), the Company must pay to him all compensation due through the date of termination, but otherwise has no further obligation to him in respect of any period following such termination. Upon Mr. Boyle's death, the Company 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 the 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 the terms of the Employment Agreement for Mr. Boyle, Mr. Boyle is entitled to receive severance pay of one year's base salary following termination of his employment by the Company other than for Cause and other than in connection with a Change in Control (as those terms are 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 the Company without Cause in connection with a Change in Control or if he voluntarily terminates his employment for Good Reason (as that term is defined in Mr. Boyle's Employment Agreement). Further, upon termination other than for Cause, 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.

Senior Vice President of Business Development and Chief Business Officer

Upon Mr. Medeiros's voluntary termination of employment (other than with Good Reason), the Company must pay to him all compensation due through the date of termination, but otherwise has no further obligation to him in respect of any period following such termination. Upon Mr. Medeiros's death, the Company 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 the Employment Agreement or Mr. Medeiros'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 the Employment Agreement for Mr. Medeiros, Mr. Medeiros is entitled to receive severance pay of one year's base salary following termination of his employment by the Company other than for Cause and other than in connection with a Change in Control (as those terms are defined in Mr. Medeiros's Employment Agreement). Mr. Medeiros is entitled to receive severance pay of two year's base salary if he is terminated by the Company without Cause in connection with a Change in Control or if he voluntarily terminates his employment for Good Reason (as that term is defined in Mr. Medeiros's Employment Agreement) in connection with a Change in Control. Further, upon termination other than for Cause, Mr. Medeiros'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.

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), the Company must pay to him all compensation due through the date of termination, but otherwise has no further obligation to him in respect of any period following such termination. Upon Dr. Shrewsbury's death, the Company 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 the 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 the Employment Agreement for Dr. Shrewsbury, Dr. Shrewsbury is entitled to receive severance pay of one year's base salary following termination of his employment by the Company other than for Cause and other than in connection with a Change in Control (as those terms are 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 the Company without Cause in connection with a Change in Control or if he voluntarily terminates his employment for Good Reason (as that term is defined in Dr. Shrewsbury's Employment Agreement) in connection with a Change in Control. Further, upon termination other than for Cause, 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.

Other Named Executive Officers

Under the employment agreement for Dr. Iversen, upon voluntary termination of employment (other than voluntary termination after a Change of Control) or termination of employment for Cause, the Company must pay to Dr. Iversen all compensation due through the date of termination, but otherwise has no further obligation to him in respect of any period following such termination. Upon the death of Dr. Iversen, the Company 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 each such executive officer's employment agreement from the date of death to the final day of the month following the month in which the death occurs.

Under his employment agreement for Dr. Iversen, is entitled to receive severance pay of one year's base salary following either termination of the executive officer without Cause or a voluntary termination by Dr. Iversen following a Change of Control (as those terms are defined in such employment agreements). Further, upon termination other than for Cause, the employment agreement provides for full vesting of all outstanding stock options, other than performance-based options.

Payment of Post-Employment Benefits for the Company's Terminated Named Executive Officers

Senior Vice President for Clinical Development and Regulatory Affairs

Effective October 27, 2008, the Company entered into a Severance and Release Agreement with Dr. Peter O'Hanley, the Company's Senior Vice President for Clinical Development and Regulatory Affairs. Under the terms of the Severance and Release Agreement, Dr. O'Hanley resigned his position effective January 9, 2009, and he received all wages, including accrued but unused vacation, earned through such date.

Dr. O'Hanley remained a full-time employee with the Company through November 28, 2008. Between December 1, 2008 and January 9, 2009, Dr. O'Hanley's employment was reduced to part-time employment of no more than two days per week and his salary was reduced a corresponding amount

during this time. Dr. O'Hanley has agreed to devote his best efforts to assisting in the smooth and successful transition of knowledge and responsibilities to his replacement.

Under the terms of the Severance and Release Agreement, the Company and Dr. O'Hanley also agreed to terminate the March 22, 2004 Employment Agreement between the Company and Dr. O'Hanley. Lastly, the Company and Dr. O'Hanley agreed to a mutual release of any and all claims arising out of Dr. O'Hanley's employment with the Company.

Compensation Committee Report

The Compensation Committee of AVI BioPharma, Inc. has reviewed and discussed with management the Compensation Discussion and Analysis contained in this Proxy Statement as required under Item 402(b) of Regulation S-K. Based on their review and discussions with management, the Compensation Committee recommended to the Company's full Board of Directors that the Compensation Discussion and Analysis be included in this Proxy Statement.

COMPENSATION COMMITTEE

William A. Goolsbee
Michael D. Casey (Chair)

Summary Compensation Table

The table below summarizes the total compensation paid or earned by each of the named executive officers for the fiscal year ended December 31, 2009. Based on the fair value of equity awards granted to named executive officers in 2009 and the base salary of the named executive officers, "Salary" accounted for, on average, approximately 38% of the total compensation of the named executive officers, incentive compensation including cash bonus and stock option grants, accounted for approximately 57% of the total compensation of the named executive officers and benefits accounted for approximately 5% of the total compensation of named executive officers:

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards \$(1)	Non-Equity Incentive Plan Compensation	Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation	Total (\$)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Leslie Hudson, Ph.D., President and Chief Executive Officer	2009	480,000	181,440	114,378	271,950			94,101(2)	1,141,869
	2008	411,551	196,020	362,970	613,974	—	—	195,786(2)	1,780,301
J. David Boyle II, Chief Financial Officer and Secretary	2009	324,000	62,111	42,579	116,550			19,437(3)	564,677
	2008	93,462	72,973	—	512,300	—	—	160,550(3)	839,285
Patrick L. Iversen, Ph.D., Senior Vice President of Strategic Alliances	2009	265,000	42,135	29,021	77,700			9,800(4)	423,656
	2008	265,000	49,737	—	87,893	—	—	9,200(4)	411,830
	2007	260,000	27,700	—	320,288	—	—	9,000(4)	616,988
Paul Medeiros, Senior Vice President of Business Development and Chief Business Officer	2009	165,202	150,000	110,000	371,840	—	—	11,628(5)	808,670
Stephen B. Shrewsbury, M.D., Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer	2009	264,295	59,288	81,600	514,665	—	—	55,558(6)	975,406

(1) The amounts in the option awards column reflect the aggregate grant date fair value of option awards granted in 2009 calculated in accordance with FASB ASC Topic 718. Assumptions used in the calculation of this amount are included in Note 2

to the financial statements set forth in our annual report on Form 10-K, filed March 16, 2010 (Commission File No. 001-14895).

- (2) The amount stated for fiscal year 2009 represents \$84,301 in temporary living and travel expenses and \$9,800 contributed to Dr. Hudson's account in Company matching contributions under the Company's 401(k) plan. The amount stated for fiscal year 2008 represents \$186,586 in relocation and temporary living expenses and \$9,200 contributed to Dr. Hudson's account in Company matching contributions under the Company's 401(k) plan.
- (3) The amount stated for fiscal year 2009 represents \$9,637 in relocation and temporary living expenses and \$9,800 contributed to Mr. Boyle's account in Company matching contributions under the Company's 401(k) plan. The amount stated for fiscal year 2008 represents \$158,390 in relocation and temporary living expenses and \$2,160 contributed to Mr. Boyle's account in Company matching contributions under the Company's 401(k) plan.
- (4) The amounts stated for fiscal years 2009, 2008 and 2007 represents funds contributed to Dr. Iversen's account in Company matching contributions under the Company's 401(k) plan.
- (5) The amount stated for fiscal year 2009 represents \$6,328 in legal expenses and \$5,250 contributed to Mr. Medeiros's account in Company matching contributions under the Company's 401(k) plan.
- (6) The amount stated for fiscal year 2009 represents \$45,758 in relocation expenses and \$9,800 contributed to Dr. Shrewsbury's account in Company matching contributions under the Company's 401(k) plan.

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

Grants of Plan Based Awards in Fiscal Year 2009

Name (a)	Grant Date(1) (b)	Estimated Future Payouts Under Non-Equity Incentive Plan Awards(1)			Estimated Future Payouts Under Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares of Stock or Units (i)	All Other Option Awards: Number of Securities Underlying Options (j)	Exercise or Base Price of Option Awards (k)	Grant Date Fair Value of Stock and Option Awards (l)
		Threshold (\$) (c)	Target (\$) (d)	Maximum (\$) (e)	Threshold (#) (f)	Target (#) (g)	Maximum (#) (h)				
Leslie Hudson, Ph.D., President and Chief Executive Officer	2/10/2009	—	—	—	—	—	—	124,324			114,378
	2/10/2009								350,000	0.92	271,950
J. David Boyle II, Chief Financial Officer and Secretary	2/10/2009	—	—	—	—	—	—	46,282			42,579
	2/10/2009								150,000	0.92	116,550
Patrick L. Iversen, Ph.D., Senior Vice President of Strategic Alliances	2/10/2009	—	—	—	—	—	—	31,545			29,021
	2/10/2009								100,000	0.92	77,700
Paul Medeiros Senior Vice President of Business Development and Chief Business Officer	5/19/2009	—	—	—	100,000	100,000	100,000				110,000
	5/19/2009								400,000	1.10	371,840
Stephen B. Shrewsbury, M.D., Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer	1/26/2009	—	—	—	—	—	—	60,000			81,600
	1/26/2009								450,000	1.36	514,665

- (1) Subject to acceleration of vesting in accordance with the named executive officers' employment agreement, all options granted in 2009 for Drs. Hudson, Iversen and Shrewsbury and Messrs. Boyle and Medeiros become exercisable starting twelve months after the grant date, with one-third of the options becoming exercisable at that time with an additional one-third of the options becoming exercisable on the second and third anniversary dates of the option grant, respectively. Effective April 20, 2010, Dr. Hudson resigned at the request of the Board of Directors, which resignation is being treated as a termination without Cause (as defined in the Employment Agreement). Accordingly, effective April 20, 2010, all of Dr. Hudson's options became fully vested and exercisable until October 20, 2010.

Outstanding Equity Awards at 2009 Fiscal Year End

Name	Option Awards						Stock Awards				
	Grant Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Options Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested	Market Value of Shares or Units of Stock That Have Not Vested (\$)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: market or payout value of unearned shares, units or other rights that have not vested (\$)	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	
Leslie Hudson, Ph.D., President and Chief Executive Officer(1)	2/8/2008	166,750	500,250	—	1.09	02/8/18	—	—	174,750	255,135	
	2/10/2009	0	350,000	—	0.92	2/10/19					
J. David Boyle II, Chief Financial Officer and Secretary(2)	8/18/2008	116,667	233,333	—	1.21	08/18/18	—	—	—	—	
	2/10/2009	0	150,000	—	0.92	2/10/19					
Patrick L. Iversen, Ph.D., Senior Vice President of Strategic Alliances(3)	1/3/2002	84,000	—	—	5.75	01/03/10	—	—	—	—	
	12/05/2002	92,400	—	—	5.35	12/05/12	—	—	—	—	
	2/22/2005	75,000	—	—	2.53	02/22/15	—	—	—	—	
	2/16/2006	75,000	—	—	7.35	02/16/16	—	—	—	—	
	2/06/2007	83,334	41,666	—	3.00	02/06/17	—	—	—	—	
	2/28/2008	25,000	50,000	—	1.39	02/28/18	—	—	—	—	
	2/10/2009	—	100,000	—	0.92	2/10/19					
Paul Medeiros Senior Vice President of Business Development and Chief Business Officer(4)	5/19/2009	—	400,000	—	1.10	05/19/19	—	—	100,000	146,000	
Stephen B. Shrewsbury, M.D., Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer(5)	1/26/2009	—	450,000	—	1.36	01/26/19	—	—	—	—	

- (1) Dr. Hudson's 667,000 options granted on February 8, 2008 at \$1.09 per share became exercisable starting February 8, 2009, with one-fourth being exercisable on this date one-fourth became exercisable on February 8, 2010, and one-fourth were scheduled to become exercisable in 2011 and 2012, respectively. Options granted on February 10, 2009 at \$0.92 per share became exercisable starting February 10, 2010, with one third being exercisable on this date and another one-third were scheduled to become exercisable on February 10, 2011 and 2012 respectively. Of Dr. Hudson's 333,000 shares of restricted stock granted on February 8, 2008, 100,000 vested on that date, 58,250 vested on February 8, 2009, 58,250 shares vested on February 8, 2010, and the remaining shares were scheduled to vest in equal annual installments of 58,250 shares in 2011 and 2012. Effective April 20, 2010, Dr. Hudson resigned at the request of the Board of Directors, which resignation is being treated as a termination without Cause (as defined in the Employment Agreement). Upon his resignation, (1) all of Dr. Hudson's options became fully vested and exercisable until October 20, 2010 and (2) Dr. Hudson became fully vested in all shares of restricted stock owned by him.
- (2) Mr. Boyle's 350,000 options granted on August 18, 2008 at \$1.21 per share became exercisable starting August 18, 2009, with one-third being exercisable on this date and another one-third being exercisable on August 18, 2010 and 2011, respectively. Options granted on February 10, 2009 at \$0.92 per share became exercisable starting February 10, 2010 with one third being exercisable on this date and another one-third being exercisable on February 10, 2011 and 2012, respectively. 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 the Company's Common Stock with an exercise price of \$1.24 per share.
- (3) Dr. Iversen's 75,000 options granted on February 16, 2006 at \$7.35 per share became exercisable starting February 16, 2007, with one-third being exercisable on this date and another one-third being exercisable on February 16, 2008 and 2009, respectively. Dr. Iversen's 125,000 options granted on February 6, 2007 at \$3.00 per share became exercisable starting February 6, 2008, with one-third being exercisable on this date and another one-third being exercisable on February 6, 2009 and 2010, respectively. Dr. Iversen's 75,000 options granted on February 28, 2008 at \$1.39 per share became exercisable starting February 28, 2009, with one-third being exercisable on this date and another one-third being exercisable on February 28, 2010 and 2011, respectively. Options granted on February 10, 2009 at \$0.92 per share became exercisable starting February 10, 2010 with one-third being exercisable on this date and another one-third being exercisable on February 10, 2011 and 2012, respectively.
- (4) Mr. Medeiros's 400,000 options granted on May 19, 2009 at \$1.10 per share will become exercisable starting May 19, 2010, with one-third being exercisable on this date and another one-third being exercisable on May 19, 2011 and 2012, respectively. Mr. Medeiros was also granted 100,000 shares of restricted stock that will vest on the performance of certain milestones. The performance milestone for these restricted shares was not achieved as of December 31, 2009.
- (5) Dr. Shrewsbury's 450,000 options granted on January 26, 2009 at \$1.36 per share became exercisable starting January 26, 2010, with one-third being exercisable on this date and another one-third being exercisable on January 26, 2011 and 2012, respectively. Also on January 26, 2009, Dr. Shrewsbury was granted 60,000 shares of restricted stock that vested July 27, 2009.

2009 Option Exercises and Stock Vested

<u>Name</u> (a)	<u>Option awards</u>		<u>Stock award</u>	
	<u>Number of Shares Acquired on Exercise (#)</u> (b)	<u>Value Realized on Exercise (\$)</u> (c)	<u>Number of Shares Acquired on Vesting (#)</u> (d)	<u>Value Realized on Vesting (\$)</u> (e)
Leslie Hudson, Ph.D., President and Chief Executive Officer			182,574	170,881
J. David Boyle II, Chief Financial Officer and Secretary			46,282	42,579
Patrick L. Iversen, Ph.D., Senior Vice President of Strategic Alliances			31,545	29,021
Paul Medeiros, Senior Vice President of Business Development and Chief Business Officer				
Stephen B. Shrewsbury, M.D., Senior Vice President of Preclinical, Clinical and Regulatory Affairs and Chief Medical Officer			60,000	126,000

None of our named executive officers exercised any stock options during fiscal year 2009.

2009 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.

2009 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 the named executive officers of the Company in the event of termination of such executive's employment. The amount of compensation payable to each named executive officer upon termination without cause or before and after a change in control, and for termination following a change of control, is shown below. The amounts shown assume that such termination was effective as of December 31, 2009, and thus includes

amounts earned through such time and are estimates of the amounts which would be paid out to the executives upon their termination.

<u>Name</u>	<u>Benefit</u>	<u>Before Change in Control, Termination w/o Cause (\$)</u>	<u>After Change in Control, Termination w/o Cause (\$)</u>	<u>Voluntary Termination (\$)</u>	<u>Death (\$)</u>	<u>Disability (\$)</u>	<u>Change in Control (\$)</u>
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Leslie Hudson, Ph.D.,(8)	Cash Severance	1,391,508(1)	1,590,048(1)		250,000(2)	250,000(2)	1,590,048(1)
President and Chief Executive Officer	Stock Options	187,046(3)	374,093(4)		(5)	(5)	374,093(4)
	Restricted Stock	127,568(6)	255,135(7)				255,135(7)
J. David Boyle II,	Cash Severance(9)	324,000	648,000		37,000(9)	10,000(10)	648,000
Chief Financial Officer and Secretary	Stock Options	139,333(4)	139,333(4)				139,333(4)
Patrick L. Iversen, Ph.D.,	Cash Severance(9)	265,000	265,000		32,083(9)	10,000(10)	265,000
Senior Vice President of Strategic Alliances	Stock Options	57,500(4)	57,500(4)				57,500
Paul Medeiros,	Cash Severance(9)	315,000	630,000		36,259(9)	10,000(10)	630,000
Senior Vice President of Business Development and Chief Business Officer	Stock Options	144,000	144,000				144,000
	Restricted Stock	146,000	146,000				146,000
Stephen B. Shrewsbury, M.D.,	Cash Severance(9)	310,000	620,000		35,833(9)	10,000(10)	620,000
Senior Vice President of Preclinical, Clinical, and Regulatory Affairs and Chief Medical Officer	Stock Options	45,000	45,000				45,000

- (1) Cash severance is payable in equal monthly installments over twenty-four months for Dr. Hudson.
- (2) Cash severance is payable in equal monthly installments over six months for Dr. Hudson.
- (3) If termination occurs before the second anniversary of Dr. Hudson's date of employment, 50% of Dr. Hudson's unvested stock options immediately become fully vested. If, on the other hand, termination occurs on or after the second anniversary of Dr. Hudson's date of employment, all unvested stock options immediately become fully vested. If Dr. Hudson had been terminated on December 31, 2009, such termination would have occurred prior to his second anniversary with the Company. Accordingly, 50% of his unvested stock options would have immediately become fully vested as of December 31, 2009. The stated dollar amount reflects the market value as of December 31, 2009, net of exercise price.
- (4) In the event of a change in control of the Company, all stock options held by the named executive officer will automatically vest and become exercisable. If the named executive officer had been terminated on December 31, 2009 and such termination occurred after a change in control, 100% of such named executive officer's unvested stock options would have been vested as of December 31, 2009. The stated dollar amount reflects the market value as of December 31, 2009, net of exercise price.
- (5) In the event of death or disability, the stock options will cease vesting, but the exercise period is automatically extended to six months following the month in which the death or disability occurs.
- (6) If termination occurs before the second anniversary of Dr. Hudson's date of employment, 50% of Dr. Hudson's unvested shares of restricted stock immediately become fully vested. If, on the other hand, termination occurs on or after the second anniversary of Dr. Hudson's date of employment, all unvested shares of restricted stock immediately become fully vested. If Dr. Hudson had been terminated on December 31, 2009, such termination would have occurred prior to his second anniversary with the Company. Accordingly, 50% of his unvested shares of restricted stock would have immediately become fully vested as of December 31, 2009. The stated dollar amount reflects the market value as of December 31, 2009, net of exercise price.
- (7) In the event of a change in control of the Company, all unvested shares of restricted stock immediately become fully vested. If Dr. Hudson had been terminated on December 31, 2009 and such termination occurred after a change in control, 100% of his unvested shares of restricted stock would have been vested as of December 31, 2009. The stated dollar amount reflects the market value as of December 31, 2009, net of exercise price.
- (8) Effective April 20, 2010, Dr. Hudson resigned at the request of the Board of Directors, which resignation is being treated as a termination without Cause (as defined in the Employment Agreement). Accordingly, he received severance benefits as described in detail in note 12 (Subsequent Events) to the financial statements filed on Form 10-K/A filed with the SEC on April 28, 2010.
- (9) Cash severance is payable as a lump sum for the respective named executive officers.
- (10) In the event of death, the named executive officer will receive all salary compensation due as of the last day of the month following the month in which the death occurs. In addition, the named executive officer will receive any unused paid time off and proceeds from life insurance. The stock options will cease vesting as of the date of death, but the exercise period is automatically extended to one year from the date of death.

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

2009 Director Compensation

The Company uses 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, the Company considers the significant amount of time that directors expend in fulfilling their duties to the Company as well as the skill-level required by the Company of directors.

The Company has certain policies pertaining to director compensation. In 2009, compensation for certain directors was adjusted to reflect the fact that they departed or joined the Board during 2009. See discussion below under "Director Compensation for Fiscal 2009" for details regarding individual director compensation.

The following director compensation policies were effective in the fiscal year 2009, and, as noted, have been modified for fiscal year 2010:

- annual compensation of \$30,000 for services as a director, other than the Chairman of the Board of Directors;
- annual compensation of \$75,000 payable to the Chairman of the Board of Directors;
- an additional \$12,000 to the Chairman of the Audit Committee;
- an additional \$8,000 to each member of the Audit Committee;
- an additional \$5,000 to the Chairman of the Compensation Committee;
- an additional \$3,000 to each member of the Compensation Committee;
- an additional \$5,000 to the Chairman of the Nominating and Corporate Governance Committee;
- an additional \$3,000 to each member of the Nominating and Corporate Governance Committee;
- For fiscal year 2009, at the meeting of the Board of Directors held immediately following the Annual Meeting, each non-employee director other than Dr. Behrens and Dr. Henney received 5,000 shares of Common Stock. These shares vest on the anniversary date of the grant;
- For fiscal year 2009, at the meeting of the Board of Directors held immediately following the Annual Meeting, each non-employee director other than Dr. Behrens and Dr. Henney received a nonqualified option to purchase 20,000 shares of Common Stock with an exercise price equal to the fair market value of the Common Stock on the date of the grant pursuant to AVI's 2002 Equity Incentive Plan. These options vest ratably on each anniversary date of the grant over four years of continued service to the Board of Directors;
- Starting in fiscal year 2010, each year at the meeting of the Board of Directors held immediately following the Annual Meeting, each non-employee director who has served at least six months will receive 5,000 shares of Common Stock. These shares will vest on the earlier of (i) the anniversary date of the grant or (ii) the date of the Annual Meeting in the year following the date of grant; and
- Starting in fiscal year 2010, each year at the meeting of the Board of Directors held immediately following the Annual Meeting, each non-employee director who has served at least six months will receive a nonqualified option to purchase 30,000 shares of Common Stock with an exercise price equal to the fair market value of the Common Stock on the date of the grant pursuant to AVI's 2002 Equity Incentive Plan. These options will vest on the earlier of (i) the anniversary date of the grant or (ii) the date of the Annual Meeting in the year following the date of grant.

In addition to the compensation paid to members of the Company's committees and instead of the compensation paid to non-employee directors at the meeting held immediately following the Annual Meeting, new non-employee directors receive:

- a nonqualified option upon joining the Board of Directors, to purchase 60,000 shares of Common Stock at an exercise price equal to the fair market value of the Common Stock on the date of the grant pursuant to AVI's 2002 Equity Incentive Plan. These options vest ratably over four years of continued service to the Board of Directors, with $\frac{1}{4}$ of the total amount shares vesting each year on the earlier of (i) the anniversary date of the grant or (ii) the date of the Annual Meeting in the year following the date of grant.

Dr. Behrens and Dr. Henney joined the Board of Directors in early 2009. As a result, they did not receive the annual non-employee equity awards granted to members of the Board of Directors at the meeting of the Board of Directors held immediately following the 2009 Annual Meeting described above. Instead, in addition to the cash compensation paid for service as a director as described above, Dr. Behrens and Dr. Henney each received a nonqualified option upon joining the Board of Directors to purchase 60,000 shares of Common Stock at an exercise price equal to the fair market value of the Common Stock on the date of the grant pursuant to AVI's 2002 Equity Incentive Plan. These options vest ratably over four years of continued service to the Board of Directors, with $\frac{1}{4}$ of the total amount shares vesting each year on the earlier of (i) the anniversary date of the grant or (ii) the date of the Annual Meeting in the year following the date of grant.

The following table sets forth a summary of the compensation we paid to our non-employee directors in 2009:

Director Compensation for Fiscal 2009

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards \$(1)	Non-Equity Incentive Plan Compensation (\$)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Michael D. Casey(4)	103,750	5,500	18,592	—	—	—	127,842
K. Michael Forrest(5)	41,250	5,500	18,592	—	—	—	65,342
William Goolsbee	47,500	5,500	18,592	—	—	—	71,592
John C. Hodgman	52,500	5,500	18,592	—	—	—	76,592
Gil Price, M.D.	47,500	5,500	18,592	—	—	—	71,592
M. Kathleen Behrens, Ph.D.(2)	26,500	—	33,498	—	—	—	59,998
Christopher S. Henney, Ph.D., D.Sc.(2)(4)	24,000	—	33,498	—	—	—	57,498
Former Director							
John W. Fara, Ph.D.(3)	20,500	—	—	—	—	—	20,500

- (1) The amounts in the option awards column reflect the aggregate grant date fair value of option awards granted in fiscal year 2009 calculated in accordance with FASB ASC Topic 718. Assumptions used in the calculation of this amount are included in Note 2 to the financial statements set forth in our annual report on Form 10-K, filed March 16, 2010 (Commission File No. 001-14895). As of December 31, 2009, each director and former director had the following number of options outstanding: Mr. Casey: 83,000; Dr. Fara: 93,334; Mr. Forrest: 393,000; Mr. Goolsbee: 73,000; Mr. Hodgman: 103,334; Dr. Price: 73,000; Dr. Behrens 60,000; and Dr. Henney 60,000.

- (2) Dr. Henney and Dr. Behrens were appointed to the Board of Directors on March 31, 2009. For fiscal year 2009, Dr. Henney and Dr. Behrens did not receive the annual grants for non-employee directors of 5,000 shares of Common Stock and the nonqualified option to purchase 20,000 shares of Common Stock pursuant to AVI's 2002 Equity Incentive Plan. Both Dr. Henney and Dr. Behrens received a nonqualified option to purchase 60,000 shares of Common Stock upon joining the Board of Directors.
- (3) Dr. Fara decided not to stand for reelection in March 2009, and ceased to be a member of the Audit Committee when his term as a director expired on May 19, 2009.
- (4) Mr. Casey and Dr. Henney decided not to stand for reelection in March 2010.
- (5) Mr. Forrest resigned from the Board of Directors on April 20, 2010. Vesting of 5,000 options granted to Mr. Forrest that were to become vested on May 19, 2010 was accelerated upon his resignation and such options became fully vested on April 20, 2010. Vesting of 5,000 shares of restricted stock granted to Mr. Forrest that were to become vested on May 19, 2010 was accelerated upon his resignation and such restricted stock became fully vested on April 20, 2010.

AUDIT COMMITTEE REPORT

Under the Amended and Restated Audit Committee Charter ("Charter"), a copy of which is posted on the Company's website (www.avibio.com), the general purpose of the Audit Committee is to assist the Board of Directors in the exercise of its fiduciary responsibility of providing oversight of the Company's financial statements and the financial reporting processes, internal accounting and financial controls, the annual independent audit of the Company's financial statements, and other aspects of the financial management of the Company. The Audit Committee is appointed by the Board of Directors and is to be comprised of at least three directors, each of whom shall be independent, as such term is defined under the listing standards of the Nasdaq Stock Market. All committee members must be financially literate, or shall become financially literate within a reasonable period of time after appointment to the Committee.

Audit and Other Fees. KPMG LLP has been the Company's auditors since 2002. During fiscal years 2009 and 2008, the fees for audit and other services performed by KPMG LLP for the Company were as follows:

Nature of Services	Amount and Percentage of Fees	
	2009	2008
Audit Fees	\$ 302,000 (76)%	\$ 333,368 (100)%
Audit Related Fees	(1) \$ 94,800 (24)%	\$ —
Tax Fees	\$ —	\$ —
All Other Fees	\$ —	\$ —
Total	\$ 396,800 (100)%	\$ 333,368 (100)%

- (1) Includes \$78,800 paid in connection with the issuance of comfort letters and \$16,000 paid in connection with an audit of the Company's 401(k) plan.

Responsibilities and Duties of the Audit Committee. The Company's management is responsible for preparing the Company's financial statements and the independent auditors are responsible for auditing those financial statements. The Committee is responsible for overseeing the conduct of these activities by the Company's management and the independent auditors. The financial management and the independent auditors of the Company have more time, knowledge and more detailed information on the Company than do Committee members. Consequently, in carrying out its oversight responsibilities,

the Committee does not provide any expert or special assurance as to the Company's financial statements or any professional certification as to the independent auditors' work.

As further described in the Charter, the specific duties of the Audit Committee include the following:

- Select, retain (subject to approval by the Company's stockholders, if required), and, when appropriate, terminate the engagement of the independent auditor and set the independent auditors' compensation;
- Select, retain (subject to approval by the Company's stockholders, if required), and, when appropriate, terminate the engagement of financial consultants and set such consultants' compensation;
- Pre-approve all permitted non-audit services to be performed by the independent auditors and/or financial consultants and establish policies and procedures for the engagement of the independent auditors and/or financial consultants to provide permitted non-audit services;
- Periodically discuss and review with the independent auditors' their independence from management and the Company and the matters included in the written disclosures required by the Independence Standards Board, including whether the provision by the independent auditors of permitted non-audit services is compatible with independence and obtain and review a report from the independent auditors describing all relationships between the independent auditors and the Company;
- Receive and review: (a) a report by the independent auditors describing the independent auditors' internal quality-control procedures and any material issues raised by the most recent internal quality-control review, or peer review, of the independent auditors, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the firm, and any steps taken to deal with any such issues; and (b) other required reports from the independent auditors;
- Meet with management and the independent auditors and/or financial consultants prior to commencement of the annual audits and internal controls analysis and testing to review and discuss the planned scope and objectives of the audit and/or such analysis and testing;
- Meet with the independent auditors, with and without management present, after completion of the annual audit to review and discuss the results of the examinations of the independent auditors and appropriate analyses of the financial statements;
- Meet with the financial consultants, with management present, after completion of the analysis and testing of the Company's internal controls by the financial consultants to review and discuss the results of such analysis and testing;
- Review and discuss (a) the reports of the independent auditors, with and without management present, as to the state of the Company's financial reporting systems and procedures, the adequacy of internal accounting and financial controls, the integrity and competency of the financial and accounting staff, disclosure controls and procedures, other aspects of the financial management of the Company and (b) current accounting trends and developments, and (c) take such action with respect thereto as may be deemed appropriate;
- Review the interim financial statements with management and the independent auditors prior to the filing of the Company's Quarterly Reports on Form 10-Q and discuss the results of the quarterly reviews and any other matters required to be communicated to the Committee by the independent auditors under generally accepted auditing standards;

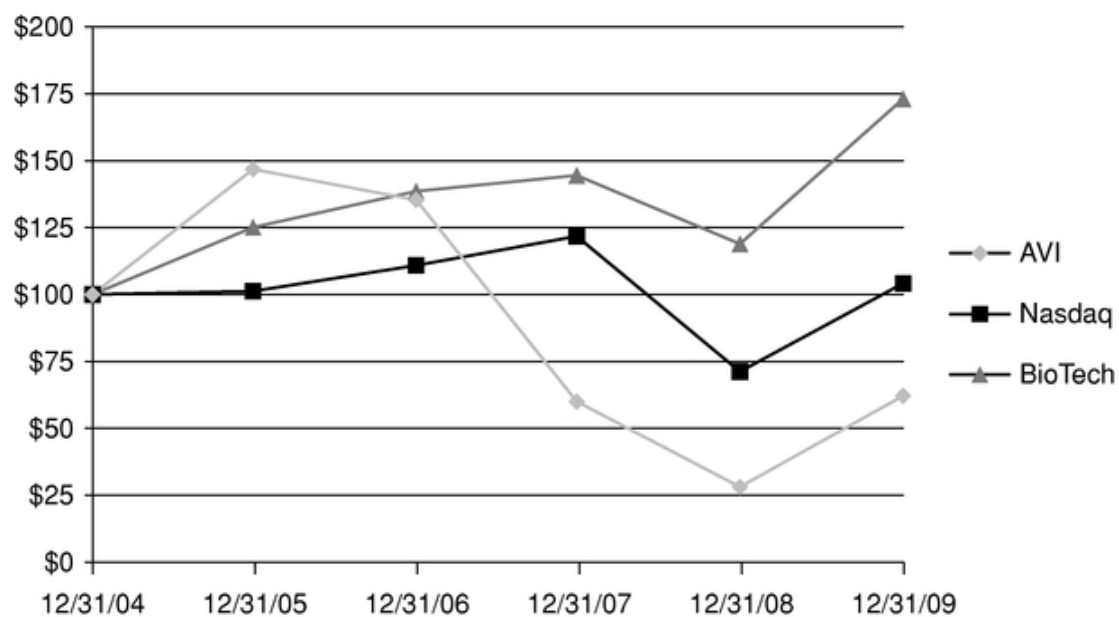
- Review and discuss with management and the independent auditors the financial statements to be included in the Company's Annual Report on Form 10-K (or the annual report to stockholders if distributed prior to the filing of Form 10-K), including the judgment of the independent auditors about the quality, not just acceptability, of accounting principles, the reasonableness of significant judgments, and the clarity of the disclosures in the financial statements;
- Recommend to the Board of Directors, based upon the Committee's review, whether the financial statements should be included in the annual report on Form 10-K;
- Review press releases, as well as Company policies with respect to earnings press releases, financial information and earnings guidance provided to analysts and rating agencies and review such releases, information and guidance for compliance with regulations governing the use of non-Generally Accepted Accounting Principles financial measures and related disclosure requirements;
- Discuss Company policies with respect to risk assessment and risk management, and review contingent liabilities and risks that may be material to the Company and major legislative and regulatory developments that could materially impact the Company's contingent liabilities and risks;
- Review (a) the status of compliance with laws, regulations, and internal procedures, including, without limitation, the Company's policies on ethical business practices; and (b) the scope and status of systems designed to promote Company compliance with laws, regulations and internal procedures, through receiving reports from management, legal counsel and third parties as determined by the Committee and report on the same to the Board of Directors;
- Establish procedures for the confidential and anonymous receipt, retention and treatment of complaints regarding the Company's accounting, internal controls, auditing matters and compliance with the Company's ethical business policies;
- Establish policies for the hiring of employees and former employees of the independent auditor;
- Prepare a report of the Committee each year for inclusion in the Company's proxy statement in accordance with SEC rules;
- Review and assess the adequacy of this Charter annually with the Board of Directors as a whole and report to the Board of Directors any significant matters as they occur during the year; and
- Conduct such other duties and undertake such other tasks as may be appropriate to the overall purposes for the Committee and as may be assigned from time to time by the Board of Directors consistent with such purposes.

Specific Audit Committee Actions Related to Review of the Company's Audited Financial Statements. In discharging its duties, the Audit Committee, among other actions, has (i) reviewed and discussed the audited financial statements to be included in the company's Annual Report on Form 10-K for the twelve months ended December 31, 2009 with management, (ii) discussed with the Company's independent auditors the matters required to be discussed by SAS 61, as amended (AICPA, Professional Standards, Vol. 1, AU380), as adopted by the Public Company Accounting Oversight Board in Rule 3200T, related to such financial statements, and (iii) received the written disclosures and the letter from the Company's independent accountants required by the applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the Audit Committee concerning independence, and has discussed with the independent accountant the independent accountant's independence, and, based on such reviews and discussions, the Audit Committee has recommended to the Board of Directors that the audited financial statements be included in the company's Annual Report on Form 10-K for the twelve months ended December 31, 2009. The Audit Committee also discussed with KPMG LLP the audit of management's assessment that the Company maintained effective internal control over financial reporting as of December 31, 2009. Please see "Management's Annual Report on Internal Control over Financial Reporting" and "Report of Independent Registered Public Accounting Firm" in the company's Annual Report on Form 10-K for the twelve months ended December 31, 2009.

AUDIT COMMITTEE
John C. Hodgman, Chairman
Gil Price, M.D.
M. Kathleen Behrens, Ph.D.

PERFORMANCE GRAPH

The following graph compares the cumulative total shareowner return on the Company's Common Stock for the period beginning December 31, 2004 and ending December 31, 2009, as compared with the total return of the NASDAQ Composite Index and the Amex Biotech Index. This graph assumes an investment of \$100 on December 31, 2002 in each of the Company's common stock, the NASDAQ Composite Index and the Amex Biotech Index, and assumes reinvestment of dividends, if any. The stock price performance shown on the graph below is not necessarily indicative of future stock price performance.



	AVII	NASDAQ Composite Index	Amex Biotech Index
End of Fiscal 2004	\$ 100.00	\$ 100.00	\$ 100.00
End of Fiscal 2005	\$ 146.81	\$ 101.24	\$ 125.11
End of Fiscal 2006	\$ 135.32	\$ 110.88	\$ 138.59
End of Fiscal 2007	\$ 60.00	\$ 121.76	\$ 144.51
End of Fiscal 2008	\$ 28.09	\$ 71.19	\$ 118.91
End of Fiscal 2009	\$ 62.13	\$ 104.17	\$ 173.11

Equity Compensation Plan Information

The following table summarizes information, as of December 31, 2009, with respect to shares of our common stock that may be issued under our existing equity compensation plans:

<u>Plan category</u>	<u>Number of securities to be issued upon exercise of outstanding options, warrants and rights</u> (a)	<u>Weighted-average exercise price of outstanding options, warrants and rights</u> (b)	<u>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))</u> (c)
Equity compensation plans approved by security holders	8,932,811	\$ 2.79	681,955(1)
Equity compensation plans not approved by security holders	-0-	—	-0-
Total	8,932,811	\$ 2.79	681,955

- (1) The number of securities remaining available for future issuance under equity compensation plans includes shares from the Company's 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 fiscal year (the "First Trading Day"), beginning with the 2003 fiscal year and continuing through the fiscal year 2011, by an amount equal to two percent (2%) of the total number of shares outstanding on the last trading day of the immediately preceding fiscal year; such increases being subject to the limitation in the next sentence. The 2002 Plan provides that, following any such adjustment, the number of then outstanding options under the Company's stock option plans and stock purchase plans, together with options in the reserve then available for future grants under the Company's stock option plans, will not exceed twenty percent (20%) of the then outstanding voting shares of capital stock of the Company, and all the actually outstanding stock options under the Company's stock option plans, together with all shares in the reserve then available for future grants under the Company's stock option and stock purchase plans. This automatic share increase feature is designed to assure that a sufficient reserve of Common Stock remains available for the duration of the 2002 Plan to attract and retain the services of key individuals essential to the Company's long-term growth and success. This feature is also designed to eliminate the uncertainty inherent in seeking an individual increase to the reserve each year as to what number of shares will be available in the reserve for option grants. Creating a certain rate of growth under the 2002 Plan assists the Company as it makes strategic personnel decisions in an effort to expand its growth, as the Company will know the approximate number of shares that will become available for issuance under the 2002 Plan. At the same time, the Company has attempted to minimize the dilutive effect that the issuance of Common Stock upon the exercise of options can have on stockholders' percentage of ownership in the Company by adopting only a 2% growth rate for the 2002 Plan. This rate, while it provides room for growth in the 2002 Plan, is a rate which the Company believes it can reasonably sustain, minimizing the risk to stockholders that the option reserve grows faster than the Company itself. The twenty percent (20%) limitation discussed above further protects shareholders by capping the size of the 2002 Plan in relation to the Company's other securities.

Stock Owned by AVI BioPharma, Inc. Management and Principal Shareholders

The following table sets forth certain information regarding the ownership of AVI Common Stock as of April 26, 2010, with respect to: (i) each person known by AVI to beneficially own more than five percent (5%) of the outstanding shares of AVI Common Stock, (ii) each of AVI's directors, (iii) each of AVI's named executive officers and (iv) all directors and executive officers as a group:

<u>Name and Address of Beneficial Owner</u>	<u>Amount and Nature of Beneficial Ownership (# of Shares)(1)</u>	<u>Percent of Class(1)</u>
Officers and Directors		
J. David Boyle II(2) AVI BioPharma, Inc. 3450 Monte Villa Parkway, Suite 101 Bothell, WA 98021	281,949	*
Patrick L. Iversen, Ph.D.(3) AVI BioPharma, Inc. 3450 Monte Villa Parkway, Suite 101 Bothell, WA 98021	546,037	*
Paul Medeiros(4) AVI BioPharma, Inc. 3450 Monte Villa Parkway, Suite 101 Bothell, WA 98021	133,334	*
Stephen B. Shrewsbury, M.D.(5) AVI BioPharma, Inc. 3450 Monte Villa Parkway, Suite 101 Bothell, WA 98021	210,000	*
Anthony Chase(6) AVI BioPharma, Inc. 3450 Monte Villa Parkway, Suite 101 Bothell, WA 98021	309,312	*
John C. Hodgman(7) AVI BioPharma, Inc. 3450 Monte Villa Parkway, Suite 101 Bothell, WA 98021	93,334	*
Gil Price, M.D.(8) AVI BioPharma, Inc. 3450 Monte Villa Parkway, Suite 101 Bothell, WA 98021	128,482	*
Michael D. Casey(9) AVI BioPharma, Inc. 3450 Monte Villa Parkway, Suite 101 Bothell, WA 98021	73,000	*

<u>Name and Address of Beneficial Owner</u>	<u>Amount and Nature of Beneficial Ownership</u> <u>(# of Shares)(1)</u>	<u>Percent of Class(1)</u>
William A. Goolsbee(10) AVI BioPharma, Inc. 3450 Monte Villa Parkway, Suite 101 Bothell, WA 98021	51,500	*
Christopher S. Henney, Ph.D., D.Sc.(11) AVI BioPharma, Inc. 3450 Monte Villa Parkway, Suite 101 Bothell, WA 98021	15,000	*
M. Kathleen Behrens, Ph.D.(12) AVI BioPharma, Inc. 3450 Monte Villa Parkway, Suite 101 Bothell, WA 98021	15,000	*
All directors and officers as a group (13 persons)(13)	1,856,948	1.7%
5% Shareholders		
George W. Haywood(14) c/o Moomjian, Waite, Wactlar & Coleman, LLP 100 Jericho Quadrangle, Suite 225 Jericho, New York 11753	9,804,799	8.9%
Eastbourne Capital Management, L.L.C.(15) 1101 Fifth Avenue, Suite 370 San Rafael, CA 94901	9,795,542	8.9%

* Less than one percent

- (1) 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 26, 2010, 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.
- (2) Includes 216,667 shares subject to options exercisable within sixty (60) days of April 26, 2010.
- (3) Includes 450,734 shares subject to options exercisable within sixty (60) days of April 26, 2010.
- (4) Includes 133,334 shares subject to options exercisable within sixty (60) days of April 26, 2010.
- (5) Includes 150,000 shares subject to options exercisable within sixty (60) days of April 26, 2010.
- (6) Includes 140,000 shares issuable upon exercise of outstanding warrants exercisable within sixty (60) days of April 26, 2010.
- (7) Includes 88,334 shares subject to options exercisable within sixty (60) days of April 26, 2010.
- (8) Includes 41,500 shares subject to options exercisable within sixty (60) days of April 26, 2010.
- (9) Includes 68,000 shares subject to options exercisable within sixty (60) days of April 26, 2010.
- (10) Includes 41,500 shares subject to options exercisable within sixty (60) days of April 26, 2010.

- (11) Includes 15,000 shares subject to options exercisable within sixty (60) days of April 26, 2010.
- (12) Includes 15,000 shares subject to options exercisable within sixty (60) days of April 26, 2010.
- (13) Includes (i) an aggregate of 1,220,069 shares subject to options exercisable within sixty (60) days of April 26, 2010 and (ii) 140,000 shares issuable upon exercise of outstanding warrants exercisable within sixty (60) days of April 26, 2010.
- (14) Based solely on information contained in the Schedule 13D filed on March 26, 2010 by George W. Haywood, which reported (i) sole voting and dispositive power as to 8,804,799 shares, which amount includes 1,475,673 shares issuable upon exercise of outstanding warrants exercisable within sixty (60) days of April 26, 2010, and (ii) shared voting and dispositive power as to 1,000,000 shares held by Mr. Haywood's spouse.
- (15) Eastbourne Capital Management, L.L.C. ("Eastbourne") is an investment adviser with voting and dispositive power for shares held by its clients, which include Black Bear Offshore Master Fund, L.P., Black Bear Fund I, L.P., Black Bear Fund II, L.L.C., and Horse Eye Level Partners, L.P., and thus is deemed to beneficially own shares held by its clients. By virtue of its control of Black Bear Offshore Master Fund, L.P., Black Bear Fund I, L.P., Black Bear Fund II, L.L.C., and Horse Eye Level Partners, L.P., Eastbourne is deemed to share beneficial ownership of (and voting and dispositive power with respect to) the shares of Stock beneficially owned by such entities. The amount stated above for Eastbourne includes (i) 2,859,140 shares held by Black Bear Offshore Master Fund, L.P., which amount includes 1,977,329 shares issuable upon exercise of outstanding warrants exercisable within sixty (60) days of April 26, 2010, (ii) 2,957,955 shares held by Black Bear Fund I, L.P., which amount includes 2,042,107 shares issuable upon exercise of outstanding warrants exercisable within sixty (60) days of April 26, 2010, (iii) 2,856,098 shares held by Black Bear Fund II, LLC, which amount includes 1,970,284 shares issuable upon exercise of outstanding warrants exercisable within sixty (60) days of April 26, 2010, and (iv) 1,122,349 shares issuable upon exercise of outstanding warrants exercisable within sixty (60) days of April 26, 2010 held by Horse Eye Level Partners, L.P.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Related Party Transactions

The Company is not aware of any related party transactions that would require disclosure.

Review, Approval or Ratification of Transactions with Related Persons

Pursuant to the Code of Business Conduct and Ethics, 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 Business Conduct and Ethics.

**ELECTION OF AVI BIOPHARMA, INC. DIRECTORS
(Proposal I)**

At the Annual Meeting, four (4) directors will be elected, each for a two-year term. Unless otherwise specified on the proxy, it is the intention of the persons named in the proxy to vote the shares represented by each properly executed proxy for the election as directors of the persons named below as nominees. The Board of Directors believes that the nominees will stand for election and will serve if elected as directors. However, if any of the persons nominated by the Board of Directors fails to stand for election or is unable to accept election, the persons named in the enclosed proxy form will vote in their discretion upon such matters. Under AVI's First Amended and Restated Bylaws, as amended (the "Bylaws"), the directors are divided into two groups, with Group I consisting of four (4) directors and Group II consisting of three (3) directors. The term of office of one group of directors expires in each year, and their successors are elected for terms of two years and until their successors are elected and qualified. There is no cumulative voting for election of directors.

Information as to Nominees and Continuing Directors

The following table sets forth the names of each of the Board of Director's nominees for election as a Group I director and those directors who will continue to serve after the Annual Meeting. Also set forth is certain other information with respect to each such person's age, the periods during which he has served as a director of AVI and positions currently held with AVI. Each nominee was selected by the Nominating and Corporate Governance Committee in accordance with its stated procedures and policies.

	<u>Age</u>	<u>Director Since</u>	<u>Expiration Of Term</u>	<u>Position Held With AVI</u>
Group I Director Nominees:				
William Goolsbee	56	2007	2010	Director
Hans Wigzell	71	N/A	N/A	Director Nominee
Gil Price, M.D.	54	2007	2010	Director
Chris Garabedian	43	N/A	N/A	Director Nominee
Group II Continuing Directors:				
John C. Hodgman	55	2004	2011	Director
M. Kathleen Behrens, Ph.D.	57	2009	2011	Director
Anthony Chase	55	2010	2011	Director

See "AVI BIOPHARMA, INC. DIRECTORS AND EXECUTIVE OFFICERS" for biographical information with respect to the Nominees and Continuing Directors and "Director Compensation" for certain information regarding compensation of directors.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT SHAREHOLDERS VOTE FOR THE ELECTION OF ITS NOMINEES FOR DIRECTOR. If a quorum is present, AVI's Bylaws provide that directors are elected by a plurality of the votes cast by the shares entitled to vote. Abstentions and broker non-votes are counted for purposes of determining whether a quorum exists at the AVI Annual Meeting, but are not counted and have no effect on the determination of whether a plurality exists with respect to a given nominee.

**RATIFICATION OF APPOINTMENT OF AVI BIOPHARMA INDEPENDENT
REGISTERED PUBLIC ACCOUNTING FIRM
(Proposal II)**

The Audit Committee has appointed KPMG, LLP ("KPMG") as independent auditors for the 2010 fiscal year. KPMG will audit the Company's consolidated financial statements for the 2010 fiscal year and perform other services. While shareholder ratification is not required by the Company's Bylaws or otherwise, the Board of Directors is submitting the selection of KPMG to the shareholders for ratification as a good corporate governance practice. If the shareholders fail to ratify the selection, the Audit Committee may, but is not required to, reconsider whether to retain KPMG. Even if the selection is ratified, the Audit Committee in its discretion may direct the appointment of a different independent public accountant or auditor at any time during the year if it determines that such a change would be in the best interest of the Company and its shareholders.

Unless otherwise indicated, properly executed proxies will be voted in favor of ratifying the appointment of KPMG LLP to audit the Company's books and accounts for the fiscal year ending December 31, 2010.

A representative of KPMG LLP is expected to be present at the AVI Annual Meeting and will be given an opportunity to make a statement if he or she desires to do so and will be available to respond to appropriate questions.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE FOR THIS PROPOSAL. The proposal will be approved if assuming the existence of a quorum at least a majority of the shares of the Company's Common Stock cast on the proposal vote in favor of approval. Abstentions and broker non-votes are counted for purposes of determining whether a quorum exists at the Annual Meeting but will not be counted and will have no effect on the determination of the outcome of the proposal. The proxies will be voted for or against the proposal, or as an abstention, in accordance with the instructions specified on the proxy form. If no instructions are given, proxies will be voted for approval of the ratification of KPMG LLP.

OTHER BUSINESS

As of the date of this Proxy Statement, the Company knows of no other business that will be presented for action at the meeting. If any other business requiring a vote of the shareholders should properly come before the meeting, the persons named in the enclosed proxy form will vote in their discretion upon such other matters.

SHAREHOLDER PROPOSALS AND SHAREHOLDER NOMINATIONS OF DIRECTORS

The Nominating and Corporate Governance Committee considers, selects and recommends to the Board of Directors for approval nominees for director and committee member positions. The Board then considers the recommendation of the Nominating and Corporate Governance Committee and decides which nominees to present to the Company's shareholders for election to the Board of Directors.

The Bylaws establish procedures governing the eligibility of nominees for election to the Board of the Company and the proposal of business to be considered by the shareholders at an annual meeting of shareholders. For nominations or other business to be properly brought before an annual meeting of shareholders by a shareholder, the shareholder must have given timely notice thereof in writing to the Secretary of the Company. Effective for all annual meetings held on or after June 1, 2008, to be timely a shareholder's notice must be delivered to the Secretary of the Company at the principal executive offices of the Company not less than 90 days nor more than 120 days prior to the first anniversary of the date on which the Company first mailed its proxy materials for the preceding year's annual meeting

of shareholders; provided, however, that in the event the date of the annual meeting of shareholders is advanced by more than 30 days or delayed by more than 30 days from such anniversary date, notice by the shareholder to be timely must be so delivered not earlier than the close of business on the later of (i) the 90th day prior to such annual meeting or (ii) the 15th day following the day on which public announcement of the date of such meeting is first made.

Such shareholder's notice described in the paragraph above must set forth: (i) the name and address of the shareholder who intends to make the nomination(s) or propose the business, (ii) a representation that the shareholder is a holder of record of stock of the Company, that the shareholder intends to vote such stock at such meeting and, in the case of nomination of a director or directors, intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice or to submit the business specified in the notice, (iii) in the case of nomination of a director or directors, the name and address of such nominee or nominees and a description of all arrangements or understandings between the shareholder and each nominee or any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by the shareholder, (iv) a brief description of the business desired to be submitted at the meeting and the reasons for proposing such business at the meeting, (v) such other information regarding each nominee or each matter of business to be proposed by such shareholder as would be required to be included in a proxy statement filed pursuant to Regulation 14A promulgated by the SEC pursuant to the Exchange Act, had the nominee been nominated, or intended to be nominated, or the matter been proposed, or intended to be proposed, by the Board of Directors of the Company, (vi) in the case of nomination of a director or directors, the consent of each nominee to serve as a director of the Company if so elected, and (vii) such other information reasonably requested by the Company.

The chairman of the meeting shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made in accordance with the procedures set forth in the Bylaws and, if any proposed nomination or business is not in compliance with the Bylaws, to declare that such defective proposal shall be disregarded.

The applicable time period for timely shareholder submissions pursuant to the above provisions for the 2011 Annual Meeting of Shareholders is January 4, 2011 (the 120th day preceding the anniversary of the date on which the Company mailed its proxy materials for the 2010 Annual Meeting) to February 3, 2011 (the 90th day preceding such anniversary). Proposals by shareholders intended to be presented for action, including proposed nominees for election to the Board of Directors, at the 2011 annual meeting of shareholders must be received by the Company at its principal executive offices, 3450 Monte Villa Parkway, Suite 101, Bothell, Washington 98021. It is suggested that such proposals be submitted by Certified Mail-Return Receipt Requested. Such notification should set forth all information relating to the proposed nominee, as is required to be disclosed in solicitations of proxies for election of directors pursuant to Regulation 14A under the Exchange Act and as required by the Company's Bylaws. The Nominating and Corporate Governance Committee will consider shareholder nominees on the same terms as nominees selected by the Nominating and Corporate Governance Committee.

In addition to the foregoing, the Company will comply with Rule 14a-8 of the Exchange Act with respect to any shareholder proposal that meets its requirements. The Company will review shareholder proposals intended to be included in the Company's proxy materials for the 2011 Annual Meeting of Shareholders which are received by the Company at its principal executive offices no later than January 4, 2011, which is the 120th day preceding the anniversary of the date on which the Company mailed its proxy materials for the 2010 Annual Meeting. Such proposals must be submitted in writing and should be sent to the attention of the Corporate Secretary of the Company.

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.

Except as set forth above, the Nominating and Corporate Governance Committee does not currently have a formal policy regarding the handling or consideration of director candidate recommendations received from shareholders, nor does the Nominating and Corporate Governance Committee have a formal process for identifying and evaluating nominees for director (including nominees recommended by shareholders). 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 the best interests of the Company. 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.

COST OF SOLICITATION

The cost of soliciting proxies will be borne by the Company. In addition to use of the mails, proxies may be solicited personally or by telephone by directors, officers and employees of the Company, who will not be additionally compensated for such activities. Such solicitations may be made personally, or by mail, facsimile, telephone, telegraph or messenger. The Company will also request persons, firms and companies holding shares in their names or in the name of their nominees, which are beneficially owned by others, to send proxy materials to and obtain proxies from such beneficial owners. The Company will reimburse such persons for their reasonable expenses incurred in that connection.

ADDITIONAL INFORMATION

A copy of the Company's Annual Report to Shareholders for the fiscal year ended December 31, 2009 accompanies this Proxy Statement. The Company is required to file an Annual Report on Form 10-K for its fiscal year ended December 31, 2009 with the SEC. The SEC maintains a web site, www.sec.gov, that contains reports, proxy statements, and certain other information filed electronically by the Company with the SEC. **Shareholders may obtain, free of charge, a copy of the Form 10-K and all other documents of the Company incorporated by reference herein by writing to Investor Relations, AVI BioPharma, Inc., 3450 Monte Villa Parkway, Suite 101, Bothell, Washington 98021, calling Investor Relations at (425) 354-5140, or visiting the Company's web site at www.avibio.com. Requested documents will be sent by first class mail (or other equally prompt means) within one business day of receipt of such request.**

Important Notice Regarding the Availability of Proxy Materials for the Shareholder Meeting to be Held on June 7, 2010

Pursuant to rules of the Securities and Exchange Commission, we have elected to provide access to our proxy materials both by sending you this full set of proxy materials, including a proxy card, and by notifying you of the availability of our proxy materials on the Internet. This Proxy Statement and our 2009 Annual Report on Form 10-K are available at <http://bnymellon.mobular.net/bnymellon/avii>.

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.

OR

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.**

71039

▼ FOLD AND DETACH HERE ▼

**THIS PROXY WILL BE VOTED AS DIRECTED, OR IF NO DIRECTION IS INDICATED, WILL BE VOTED "FOR"
THE ELECTION OF DIRECTORS AND "FOR" ITEM 2.**

Please mark your votes as
indicated in this example

THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR PROPOSAL 1.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR PROPOSAL 2.

ITEM 1. ELECTION OF DIRECTORS.

Elect four Group I directors for two-year terms or until
their respective successors are elected and qualified.

Nominees:

- 01 William Goolsbee
- 02 Gil Price, M.D.
- 03 Hans Wigzell
- 04 Chris Garabedian

FOR ALL WITHHOLD EXCEPTIONS FOR ALL

**ITEM 2. RATIFICATION OF INDEPENDENT REGISTERED
PUBLIC ACCOUNTING FIRM FOR 2010.**

Ratify the selection of KPMG LLP as the Company's
independent registered public accounting firm for
fiscal year ending December 31, 2010.

FOR AGAINST ABSTAIN

**(INSTRUCTIONS: To withhold authority to vote for any individual nominee, mark the
"Exceptions" box above and write that nominee's name in the space provided below.)**

*Exceptions



Mark Here for
Address Change
or Comments
SEE REVERSE

NOTE: Please sign as name appears hereon. Joint owners should each sign. When signing as attorney, executor, administrator, trustee or guardian, please give full title as such.

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/isd>
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Important notice regarding the Internet availability of proxy materials for the 2010 Annual Meeting of Shareholders. The Proxy Statement and the 2009 Annual Report to Shareholders are available at: <http://bnymellon.mobular.net/bnymellon/avii>

▼ FOLD AND DETACH HERE ▼

**PROXY
AVI BIOPHARMA, INC.**

2010 Annual Meeting of Shareholders – June 7, 2010

THIS PROXY IS SOLICITED BY THE BOARD OF DIRECTORS OF THE COMPANY

The undersigned hereby appoints J. David Boyle II and Paul Medeiros, 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 2010 Annual Meeting of Shareholders of the company to be held June 7, 2010 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
PO BOX 3550
SOUTH HACKENSACK, NJ 07606-9250

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