

ADVENTRX PHARMACEUTICALS INC

Form DEF 14A

April 17, 2007

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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
- Soliciting Material Pursuant to §240.14a-12

ADVENTRX PHARMACEUTICALS, 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)(4) and 0-11.
 - (1) Title of each class of securities to which transaction applies:

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

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(1) Amount Previously Paid:

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(4) Date Filed:

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ADVENTRX PHARMACEUTICALS, INC.
6725 Mesa Ridge Road, Suite 100
San Diego, CA 92121
NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
To Be Held May 23, 2007

The Annual Meeting of Stockholders of ADVENTRX Pharmaceuticals, Inc. (the Company) will be held on May 23, 2007 at 10:00 a.m. local time at the Hyatt Regency La Jolla at Aventine located at 3777 La Jolla Village Drive, San Diego, California, USA 92122. The Annual Meeting is being held for the following purposes, as more fully described in the accompanying Proxy Statement:

1. To elect six directors to hold office until the next Annual Meeting of Stockholders and until their successors are elected and qualified.
2. To ratify the appointment of J.H. Cohn LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2007.
3. To transact such other business as may properly come before the meeting or any adjournments or postponements thereof.

Only stockholders of record at the close of business on April 6, 2007 (the Record Date) will be entitled to notice of, and to vote at, such meeting or any adjournments or postponements thereof. A list of stockholders entitled to vote at the meeting will be available for inspection during ordinary business hours at the Company's corporate offices located at 6725 Mesa Ridge Road, Suite 100, San Diego, CA 92121 for at least 10 days prior to the meeting, and will also be available for inspection at the meeting.

BY ORDER OF THE BOARD OF DIRECTORS

Evan M. Levine
Chief Executive Officer and Director
San Diego, CA
April 23, 2007

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YOUR VOTE IS IMPORTANT!

You are cordially invited to attend the Annual Meeting. However, to ensure that your shares are represented at the meeting, please submit your proxy or voting instructions by mail, using the return envelope provided. Please see the instructions on the proxy and voting instruction card. Submitting a proxy or voting instructions will not prevent you from attending the Annual Meeting and voting in person, if you so desire, but will help the Company secure a quorum and reduce the expense of additional proxy solicitation.

ADVENTRX Pharmaceuticals, Inc.
6725 Mesa Ridge Road, Suite 100
San Diego, CA 92121
(858) 552-0866

PROXY STATEMENT

2007 ANNUAL MEETING OF STOCKHOLDERS

ADVENTRX Pharmaceuticals, Inc. (the Company) is furnishing this Proxy Statement and the enclosed proxy in connection with the solicitation of proxies by the Board of Directors of the Company (the Board) for use at the Annual Meeting of Stockholders to be held on May 23, 2007, at 10:00 a.m. local time, at the Hyatt Regency La Jolla at Aventine located at 3777 La Jolla Village Drive, San Diego, California, USA 92122, and at any adjournments thereof (the Annual Meeting). These materials are being mailed to stockholders on or about April 23, 2007.

Only holders of the Company's common stock as of the close of business on April 6, 2007 (the Record Date) are entitled to vote at the Annual Meeting. Stockholders who hold shares of the Company in street name may vote at the Annual Meeting only if they hold a valid proxy from their broker. As of the Record Date, there were 89,676,739 shares of common stock outstanding.

A majority of the outstanding shares of common stock entitled to vote at the Annual Meeting must be present in person or by proxy in order for there to be a quorum at the meeting. Stockholders of record who are present at the meeting in person or by proxy and who abstain from voting, including brokers holding customers' shares of record who cause abstentions to be recorded at the meeting, will be included in the number of stockholders present at the meeting for purposes of determining whether a quorum is present.

Each stockholder of record is entitled to one vote at the Annual Meeting for each share of common stock held by such stockholder on the Record Date. Stockholders do not have cumulative voting rights. Stockholders may vote their shares by using the proxy card enclosed with this Proxy Statement. All proxy cards received by the Company that are properly signed and have not been revoked will be voted in accordance with the instructions contained in the proxy cards. If a signed proxy card is received which does not specify a vote or an abstention, the shares represented by that proxy card will be voted for the nominees to the Board listed on the proxy card and in this Proxy Statement and for the ratification of the appointment of J.H. Cohn LLP as the Company's independent auditors for the fiscal year ending December 31, 2007. The Company is not aware, as of the date hereof, of any matters to be voted upon at the Annual Meeting other than those stated in this Proxy Statement and the accompanying Notice of Annual Meeting of Stockholders. If any other matters are properly brought before the Annual Meeting, the enclosed proxy card gives discretionary authority to the persons named as proxies to vote the shares represented by the proxy card in their discretion.

Under the Company's bylaws, if a quorum exists at the meeting, the affirmative vote of a majority of the votes cast at the meeting is required for the election of directors. A properly executed proxy marked "withhold authority" with respect to the election of one or more directors will not be voted with respect to the director or directors indicated, although it will be counted for purposes of determining whether there is a quorum. For each other item, the affirmative vote of the holders of a majority of the shares represented in person or by proxy and

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entitled to vote on the item will be required for approval. A properly executed proxy marked Abstain with respect to any such matter will not be voted, although it will be counted for purposes of determining whether there is a quorum. Accordingly, a withhold of authority or an abstention will have the effect of a negative vote.

For shares held in street name through a broker or other nominee, the broker or nominee may not be permitted to exercise voting discretion with respect to some of the matters to be acted upon. Thus, if stockholders do not give their broker or nominee specific instructions, their shares may not be voted on those matters and will not be counted in determining the number of shares necessary for approval. Shares represented by such broker non-votes will, however, be counted in determining whether there is a quorum.

A stockholder of record may revoke a proxy at any time before it is voted at the Annual Meeting by (a) delivering a proxy revocation or another duly executed proxy bearing a later date to ADVENTRX Pharmaceuticals, Attn: Secretary, 6725 Mesa Ridge Road, Suite 100, San Diego, CA 92121 or (b) attending the Annual Meeting and voting in person. Attendance at the Annual Meeting will not revoke a proxy unless the stockholder actually votes in person at the meeting.

The proxy card accompanying this Proxy Statement is solicited by the Board. The Company will pay all of the costs of soliciting proxies. In addition to solicitation by mail, officers, directors and employees of the Company may solicit proxies personally, or by telephone, without receiving additional compensation. Although the Company has not yet done so, it may retain a firm to assist in the solicitation of proxies in connection with the Annual Meeting. The Company would pay such firm, if any, customary fees, expected to be no more than \$10,000, plus expenses. The Company, if requested, will also pay brokers, banks and other fiduciaries who hold shares for beneficial owners for their reasonable out-of-pocket expenses of forwarding these materials to stockholders.

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The name, age and year in which the term expires of each member of the Board is set forth below:

| Name | Age | Position | Term Expires on the Annual Meeting held in the Year |
|---------------------|------------|--|--|
| Evan M. Levine | 41 | Chief Executive Officer | 2007 |
| Mark N.K. Bagnall | 50 | Audit Committee (chair), Compensation Committee and Nominating & Governance Committee | 2007 |
| Alexander J. Denner | 37 | Compensation Committee | 2007 |
| Michael M. Goldberg | 48 | Audit Committee, Compensation Committee (chair) and Nominating & Governance Committee | 2007 |
| Jack Lief | 61 | Audit Committee, Compensation Committee and Nominating & Governance Committee | 2007 |
| Mark J. Pykett | 43 | Audit Committee, Compensation Committee and Nominating & Governance Committee (chair) | 2007 |

At the Annual Meeting, the stockholders will vote on the election of six directors to serve until the annual meeting of stockholders in 2008 and until their successors are elected and qualified. The Company's bylaws allow the authorized number of directors to be not less than three or more than nine; currently, the size of the Board is set at seven. In March 2007, the Company announced that M. Ross Johnson, Ph.D., currently the Company's chairman, would retire from the Board effective May 23, 2007, the date of the Annual Meeting, at which time the Company anticipates the size of the Board will be set at six. Proxies may not be voted for a greater number of persons than the number of nominees named.

NOMINEES FOR ELECTION TO THE BOARD

The following individuals have been nominated for election to the Board:

Mark N.K. Bagnall, C.P.A. Mr. Bagnall has served as a director since February 2004. Mr. Bagnall currently is senior vice president and chief finance and operations officer of Metabolex, Inc., a privately held pharmaceutical company focused on the development of drugs to treat diabetes and related metabolic disorders, positions he has held since June 2000. Mr. Bagnall has been in the biotechnology industry for over 17 years. In the 12 years prior to joining Metabolex, Mr. Bagnall held the top financial position at four life science companies: Metrika, Inc., a privately held diagnostics company, and three public biotechnology companies, Progenitor, Inc., Somatix Therapy Corporation, and Hana Biologics, Inc. During his career in biotechnology, he has managed several private and public financings, merger and acquisition transactions and corporate licensing agreements. Mr. Bagnall received his B.S. in Business Administration from the University of California at Berkeley, Haas School of Business and is a Certified Public Accountant.

Alexander J. Denner, Ph.D. Dr. Denner has served as a director since October 2006. Dr. Denner currently serves as a managing director of entities affiliated with Carl C. Icahn, including Icahn Partners LP and Icahn Partners Master

Fund LP, both private investment funds. From April 2005 to May 2006, Dr. Denner served as a portfolio manager specializing in healthcare investments for Viking Global Investors. Prior to Viking, he served in a

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variety of roles at Morgan Stanley, beginning in 1996, including as portfolio manager of healthcare and biotechnology mutual funds. Dr. Denner currently serves as a director of ImClone Systems Incorporated and HyperMed, Inc., a privately held company specializing in imaging platforms for medical and surgical applications. Dr. Denner received a B.S. from the Massachusetts Institute of Technology and a M.S., M.Phil. and Ph.D. from Yale University. Dr. Denner was nominated by, among others, entities affiliated with Mr. Icahn. Information regarding the arrangement by which Dr. Denner was selected as a director is located under the caption Director Nominations, below.

Michael M. Goldberg, M.D. Dr. Goldberg has served as a director since January 2004. Dr. Goldberg currently is a managing partner of Montaur Capital Partners, an investment firm, a position he has held since January 2007, and a director of Emisphere Technologies, Inc., a biopharmaceutical company specializing in the oral delivery of therapeutic macromolecules and other compounds, a position he has held since August 1990. From August 1990 to January 2007, Dr. Goldberg was chairman and chief executive officer of Emisphere Technologies. Prior to this, Dr. Goldberg was a vice president for The First Boston Corporation, where he was a founding member of the Healthcare Banking Group. He received a B.S. from Rensselaer Polytechnic Institute, an M.D. from Albany Medical College of Union University and an M.B.A. from Columbia University Graduate School of Business.

Evan M. Levine. Mr. Levine currently is the Company's chief executive officer, a position he has held since September 2004, and a director, a position he has held since October 2002. Mr. Levine served as the Company's president and chief executive officer from September 2004 through September 2006. From January 2004 until August 2005, Mr. Levine served as the Company's vice chairman and, from October 2002 until August 2005, Mr. Levine served as chief operating officer and secretary of the Company. From March 2002 to June 2002, Mr. Levine served as the interim chief executive officer of Digital Courier Technologies, Inc., a provider of advanced e-payment services for businesses, merchants and financial institutions. From 1997 to 2001, he served as managing principal and portfolio manager of Brown Simpson Asset Management, a private equity fund, specializing in structured finance for public companies. From 1996 to 1997, he served as senior vice president of convertible sales and trading at Dillon Read & Company, a financial services company, managing a proprietary convertible portfolio and supervising all institutional sales and trading activity. From 1993 to 1996, he served as vice president of convertible sales and trading at Hambrecht & Quist, a financial services company, where he handled all convertible operations and augmented investment banking and corporate finance revenues through his involvement in the placement of convertible products. From 1992 to 1993, he served as a global arbitrage trader at Spectrum Trading Partners, a financial derivatives trading company, where he was responsible for maintaining market neutral and currency neutral hedges for an international convertible securities portfolio. Mr. Levine has over 18 years of investment banking, venture capital, institutional trading, arbitrage dealing, and senior corporate management experience. He played key roles in the deployment of over \$1 billion of investment capital into the health care and technology sectors. Mr. Levine received his B.A. in Economics and Finance from Rutgers University and has completed graduate coursework for an M.B.A. at New York University's Stern School of Business.

Jack Lief. Mr. Lief has served as a director since September 2006. Mr. Lief is a co-founder and since April 1997 has served as president, chief executive officer and a director of Arena Pharmaceuticals, Inc., a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of small molecule drugs targeting G protein-coupled receptors. From 1995 to April 1997, Mr. Lief served as an advisor and consultant to numerous biopharmaceutical organizations. From 1989 to 1994, Mr. Lief served as senior vice president, corporate development and secretary of Cephalon, Inc., a biopharmaceutical company. From 1983 to 1989, Mr. Lief served as director of business development and strategic planning for Alpha Therapeutic Corporation, a manufacturer of biological products. Mr. Lief joined Abbott Laboratories, a pharmaceutical company, in 1972, where he served until 1983, most recently as the head of international marketing research. Mr. Lief is a director of Accumetrics, Inc., a developer and marketer of diagnostic tests, ReqMed Company, Ltd., a provider of partnering opportunities, R&D strategies and bio-venture funding, and TaiGen Biotechnology Co., Ltd., a biotechnology company. Mr. Lief is also an executive board member of BIOCOM, a life science industry association representing more than 450 member companies in San Diego and Southern California, and he was the chairman of BIOCOM from March 2005 to March 2006. Mr. Lief holds a B.A. from Rutgers University and an M.S. in Psychology (Experimental and Neurobiology) from Lehigh University.

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Mark J. Pykett, Ph.D., M.B.A., V.M.D. Dr. Pykett has served as a director since February 2004. Dr. Pykett currently is president and chief operating officer of Boston Life Sciences, Inc., positions he has held since November 2004. From May 1996 until April 2003, Dr. Pykett served as president and chief executive officer and a director of Cytomatrix, LLC, a private biotechnology company focused on the research, development and commercialization of novel cell-based therapies that Dr. Pykett co-founded. Cytomatrix was acquired by Cordlife, Pte. Ltd., a subsidiary of CyGenics Ltd., a public biotechnology company listed on the Australian Stock Exchange. From April 2003 to February 2004, Dr. Pykett served as president of Cordlife and then as president and director of CyGenics from February 2004 until November 2004. In addition, Dr. Pykett served as a director of Cordlife from April 2003 through November 2005 and a director of Oramax, LLC, development stage dental implant company developing biomaterials for dental prostheses, from 2000 through 2006. Dr. Pykett graduated Phi Beta Kappa, Summa Cum Laude from Amherst College, holds a veterinary degree, Phi Zeta, Summa Cum Laude, and doctorate in molecular biology from the University of Pennsylvania, and received an M.B.A. Beta Gamma Sigma from Northeastern University. He completed post-doctoral fellowships at the University of Pennsylvania and Harvard University. Dr. Pykett held an adjunct faculty position at the Harvard School of Public Health from 1997 to 2004.

There are no family relationships among any of the Company's directors or executive officers.

CORPORATE GOVERNANCE

The Board met ten times during 2006 and action was taken via unanimous written consent seven times. During 2006, the audit committee met eight times, the compensation committee met twice and action was taken by the compensation committee via unanimous written consent six times and the nominating and governance committee met five times and action was taken by the nominating and governance committee via unanimous written consent twice. Each member of the Board nominated for re-election attended 75% or more of the aggregate of (i) the total number of Board meetings held during the period of such member's service and (ii) the total number of meetings of committees on which such member served, during the period of such member's service.

Board Independence

The Board has determined that Mr. Bagnall, Dr. Denner, Dr. Goldberg, Mr. Lief and Dr. Pykett are independent under the rules of the American Stock Exchange. Under applicable rules of the American Stock Exchange and the Securities and Exchange Commission (the SEC), the existence of certain related party transactions above certain thresholds between a director and the Company are required to be disclosed and preclude a finding by the Board that the director is independent. In addition to transactions required to be disclosed under these American Stock Exchange and SEC rules, the Board considered certain other relationships in making its independence determinations and determined in each case that such other relationships did not impair the director's ability to exercise independent judgment on behalf of the Company. In particular, with respect to Dr. Denner, the Board considered Dr. Denner's position with entities affiliated with Mr. Icahn and such entities (a) ownership position in the Company, (b) rights under that certain Rights Agreement, dated July 27, 2005 (the Rights Agreement), pursuant to which such entities, along with others, are, among other things, entitled to participate in future sales by the Company of additional securities and cause the Board to nominate a Board nominee selected by them and (c) execution of an agreement with Mr. Levine, the Company's chief executive officer, pursuant to which, among other things, Mr. Levine may be prohibited from (without the prior written consent of a majority of the Board, including the director designated by such entities) accepting or requesting any increase in, or causing the Company to increase, the amount of compensation payable by or on behalf of the Company to Mr. Levine (including his base compensation, bonus compensation, benefits or otherwise).

Board Committees

The Board currently has standing audit, compensation and nominating and governance committees.

Audit Committee. The audit committee currently consists of Mr. Bagnall (chair), Dr. Goldberg, Mr. Lief and Dr. Pykett. The Board has determined that all members of the audit committee are independent directors and meet the eligibility standards for audit committee service under the rules of the American Stock Exchange. The Board has determined that Mr. Bagnall qualifies as an audit committee financial expert as defined by the rules of the SEC. The purpose of the audit committee is to oversee the accounting and financial reporting processes of the Company and audits of its financial statements. The responsibilities of the audit committee include appointing and providing the

compensation of the independent accountants to conduct the annual audit of the Company's accounts,
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reviewing the scope and results of the independent audits, reviewing and evaluating internal accounting policies, and approving all professional services to be provided to the Company by its independent accountants. The audit committee is governed by a written charter approved by the Board.

Compensation Committee. The compensation committee currently consists of Dr. Goldberg (chair), Mr. Bagnall, Dr. Denner, Mr. Lief and Dr Pykett. The Board has determined that all members of the compensation committee are independent directors under the rules of the American Stock Exchange. The compensation committee administers the Company's benefit plans, reviews and administers all compensation arrangements for executives, and establishes and reviews general policies relating to the compensation and benefits of the Company's executives and employees. The compensation committee meets several times a year and consults with independent compensation consultants, as it deems appropriate, to review, analyze and set compensation packages for the Company's executives. The compensation committee is governed by a written charter approved by the Board.

Under its charter, the compensation committee has authority to determine the amount and form of compensation paid to the Company's chief executive officer, and to take such action, and to direct the Company to take such action, as is necessary and advisable to compensate the Company's chief executive officer in a manner consistent with its determinations, and shall deliberate and vote on all such actions outside the presence of the Company's chief executive officer. In addition, under its charter, the compensation committee will review at least annually the performance of the Company's chief executive officer, including in light of goals and objectives established for such performance, and in light of such review determine his or her compensation. Since becoming the Company's chief executive officer in September 2004 and through 2006, other than changes in benefits available to all employees, the compensation of Mr. Levine, the Company's current chief executive officer, has not been changed. In March 2007, the Board reviewed Mr. Levine's performance in 2006 and approved aspects of a compensation package for Mr. Levine for 2007.

The compensation committee has authority to determine the amount and form of compensation paid to the Company's executives, employees, consultants and advisors and to review the performance of such persons in order to determine appropriate compensation. The compensation committee has authority to take such action, and to direct the Company to take such action, as is necessary and advisable to compensate such persons and to implement such policies and practices in a manner consistent with its determinations. It is expected that the Committee may delegate its authority on these matters with regard to non-executive employees of the Company to officers and other appropriate supervisory personnel of the Company.

Except with respect to its responsibilities regarding setting compensation for the Company's chief executive officer and the Company's other executives, the compensation committee may delegate its authority to individual members of the compensation committee or other members of the Board. In addition, to the extent permitted by applicable law, the compensation committee may delegate to one or more officers of the Company (or other appropriate supervisory personnel) the authority to grant stock options and other stock awards to employees or consultants (who are not executives or members of the Board) of the Company or of any subsidiary of the Company; provided, however that (a) the number of shares of the Company's common stock underlying such options and other awards are consistent with guidelines previously approved by the compensation committee; (b) the per-share exercise or purchase price of such awards equals the fair market value of the Company's common stock on the date of grant; and (c) the vesting and other terms that apply to such awards are the same terms as apply under the Company's standard form of agreement under the applicable equity compensation plan, provided that such officer(s) may, in such officer(s) discretion, grant awards that are fully vested on the date of grant of the award or grant awards with more restrictive vesting requirements.

Information regarding the process by which the compensation committee makes its determinations regarding executive compensation, as well as its use of compensation consultants, is located under the caption "Compensation Discussion and Analysis," below.

Nominating and Governance Committee. The nominating and governance committee currently consists of Dr. Pykett (chair), Mr. Bagnall, Dr. Goldberg and Mr. Lief, each of whom the Board has determined is an independent director under the rules of the American Stock Exchange. The nominating and governance committee's responsibilities include recommending to the Board nominees for possible election to the Board and providing oversight with respect to corporate governance and succession planning matters. The nominating and governance committee is governed by

a written charter approved by the Board.

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Charters for the Board's audit, compensation and nominating and governance committees, as well as the Company's corporate governance guidelines, are posted on the Company's corporate website at: www.adventrx.com.

DIRECTOR NOMINATIONS

Criteria for Board Membership. In selecting candidates for appointment or re-election to the Board, the nominating and governance committee considers the appropriate balance of experience, skills and characteristics required of the Board, and seeks to insure that at least a majority of the directors are independent under the rules of the American Stock Exchange, and that members of the audit committee meet the financial literacy and sophistication requirements under the rules of the American Stock Exchange (including that at least one of them qualifies as an audit committee financial expert under the rules of the SEC. Nominees for director are selected on the basis of their depth and breadth of experience, wisdom, integrity, ability to make independent analytical inquiries, understanding of the Company's business environment, willingness to devote adequate time to Board duties, the interplay of the nominee's experience and skills with those of other directors and the extent to which the nominee would be a desirable addition to the Board and any committees of the Board.

Stockholder Nominees. Other than under the Rights Agreement, the Company has never received a proposal from a stockholder of the Company to nominate a director. The nominating and governance committee will consider qualified candidates for director suggested by stockholders applying the criteria located under the caption *Criteria for Board Membership*, above. Any such nominations should be submitted to the nominating and governance committee c/o the secretary of the Company and must include the following information: a statement that the writer is a stockholder of the Company and is proposing a candidate for consideration by the nominating and governance committee; the name, age, business address and residence address of the nominee; a statement of the nominee's business and educational experience; the principal occupation or employment of the nominee; the class and number of shares of the Company that are beneficially owned by the nominee; a detailed description of all relationships, arrangements or understandings between the proposing stockholder and the nominee and any other person or persons (naming such person or persons) pursuant to which the nominations are to be made by the stockholder; a detailed description of all relationships, arrangements or understandings between the nominee and any service-provider, supplier or competitor of the Company; information regarding each of the criteria located under the caption *Criteria for Board Membership*, above, in sufficient detail to allow the nominating and governance committee to evaluate the nominee; and a statement from the nominee that the nominee is willing to be considered and willing to serve as a director if nominated and elected. In addition, stockholders of the Company wishing to propose business to be conducted at an annual meeting of stockholders must comply with the requirements set forth in the bylaws of the Company.

Process for Identifying and Evaluating Nominees. The nominating and governance committee believes the Company is well-served by its current directors. In the ordinary course, absent special circumstances or a material change in the criteria for Board membership, the nominating and governance committee will re-nominate incumbent directors who continue to be qualified for Board service and are willing to continue as directors. If an incumbent director is not standing for re-election, or if a vacancy on the Board occurs between annual stockholder meetings, the nominating and governance committee will seek out potential candidates for Board appointment who meet the criteria for selection as a nominee and have the specific qualities or skills being sought. Director candidates will be selected based on input from members of the Board, senior management of the Company and, if the nominating and governance committee deems appropriate, a third-party search firm. The nominating and governance committee will evaluate each candidate's qualifications and check relevant references; in addition, such candidates will be interviewed by at least one member of the nominating and governance committee. Based on this input, the nominating and governance committee will evaluate which of the prospective candidates is qualified to serve as a director and whether the nominating and governance committee should recommend to the Board that this candidate be appointed to fill a current vacancy on the Board, or presented for the approval of the stockholders, as appropriate.

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Board Nominees for the 2007 Annual Meeting. Each of the nominees listed in this Proxy Statement are current directors standing for re-election. Two of the nominees standing for re-election at the Annual Meeting, Mr. Lief and Dr. Denner, were first elected by the Board in September and October, respectively, of 2006.

Mr. Lief was recommended as a nominee by the Company's chief executive officer. Dr. Denner is the successor to Keith Meister and is the Purchaser Designee (as defined in the Rights Agreement, to which the Company is a party). As a result of its obligations under the Rights Agreement, in August 2005, the Company set the authorized number of Board directors at six and appointed Mr. Meister to the Board. Under the Rights Agreement, until such time as designated in the Rights Agreement, the Company is required to cause the Board to nominate a Board nominee (the Purchaser Designee) selected by the Purchasers (as defined in the Rights Agreement) who at the time own a majority of the Purchased Shares (as defined in the Rights Agreement).

Pursuant to that certain First Amendment to Rights Agreement, dated September 22, 2006, the Rights Agreement was amended to allow the Board to set the authorized number of directors at seven if the vacancy created by such action was filled by Jack Lief; provided that, if at any time there are then seven members of the Board and one of such members is removed or resigns, retires or dies and the Purchaser Designee, if any, does not approve a successor, the Company will do those things reasonably necessary and within its control to, as soon as reasonably practicable after the effective date of such removal, resignation, retirement or death, set the authorized number of Board directors at six.

COMMUNICATIONS WITH DIRECTORS

Stockholders who wish to communicate with the Company's directors to report complaints or concerns related to accounting, internal accounting controls or auditing may do so using the audit committee's procedures for the receipt of such communications. These procedures allow submitting the complaint or concern telephonically as set forth in the Company's Code of Business Conduct and Ethics, which is available on the Company's website at www.adventrx.com.

If any stockholder of the Company wishes to address questions regarding the business affairs of the Company directly to the Board, or any individual director, the stockholder must submit the inquiry in writing to: ADVENTRX Pharmaceuticals, Inc., Attn: Investor Relations, 6725 Mesa Ridge Road, Suite 100, San Diego, CA 92121. Stockholders of the Company should indicate they are a stockholder of the Company. Depending on the subject matter, investor relations will (alone or in concert with other personnel of the Company, as appropriate): forward the inquiry to the chair of the Board, who may forward the inquiry to a particular director if the inquiry is directed towards a particular director; forward the inquiry to the appropriate personnel within the Company (for instance, if it is primarily commercial in nature); attempt to handle the inquiry directly (for instance, if it is a request for information about the Company or a stock-related matter); or not forward the inquiry, if it relates to an improper or inappropriate topic or is otherwise irrelevant.

The Company has a policy of encouraging all directors to attend annual stockholder meetings, though none of the Company's directors attended the Company's 2006 annual meeting.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

No interlocking relationship exists, or in the past fiscal year has existed, between any member of the Company's compensation committee and any member of any other company's board of directors or compensation committee.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL HOLDERS AND MANAGEMENT

The following table sets forth information regarding ownership of the Company's common stock as of March 31, 2007 (the Evaluation Date), or an earlier date for information based on filings with the SEC, by (a) each person known to the Company to own more than 5% of the outstanding shares of the Common Stock, (b) each director and nominee for director of the Company, (c) the Company's Chief Executive Officer, Chief Financial Officer and each other executive officer named in the compensation tables appearing later in this Proxy Statement and (d) all directors and executive officers as a group. The information in this table is based solely on statements in filings with the SEC or other reliable information.

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| Name and Address of Beneficial Owner(1) | Amount and Nature of Beneficial Ownership(2) | Percent of Class |
|---|---|-----------------------------|
| Principal Stockholders | | |
| Funds affiliated with Carl C. Icahn (3) c/o Icahn Associates Corp. 767 Fifth Avenue New York, NY 10153 | 8,648,648 | 9.2% |
| Evan M. Levine (4) | 4,570,000 | 5.0% |
| Directors and Named Executive Officers | | |
| M. Ross Johnson (5) | 2,217,612 | 2.5% |
| Mark N.K. Bagnall (6) | 145,833 | * |
| Alexander J. Denner. (7) | 8,648,648 | 9.2% |
| Michael M. Goldberg (8) | 221,833 | * |
| Evan M. Levine (4) | 4,570,000 | 5.0% |
| Jack Lief (9) | 33,333 | * |
| Mark J. Pykett (10) | 153,833 | * |
| James A. Merritt (11) | 55,000 | * |
| Gregory P. Hanson | 0 | * |
| Joan M. Robbins (12) | 554,166 | * |
| Brian M. Culley (13) | 107,221 | * |
| Carrie E. Carlander | 0 | * |
| Robert A. Daniel (14) | 53,124 | * |
| All directors and executive officers as a group (13 persons) (15) | 16,760,603 | 17.5% |

*Less than 1%.

(1) Unless otherwise indicated, the address of each of the named individuals is c/o ADVENTRX Pharmaceuticals, Inc., 6725 Mesa Ridge Road, Suite 100, San Diego, CA 92121.

(2) Beneficial ownership of shares is determined in accordance with the rules of the SEC and

generally includes any shares over which a person exercises sole or shared voting or investment power, or of which a person has the right to acquire ownership within 60 days after the Evaluation Date. Except as otherwise noted, each person or entity has sole voting and investment power with respect to the shares shown. Unless otherwise noted, none of the shares shown as beneficially owned on this table are subject to pledge.

- (3) Consists of
 - (a) 864,865 shares of common stock held by High River Limited Partnership (High River);
 - (b) 1,660,540 shares of common stock held by Icahn Partners LP (Icahn Partners);
 - (c) 1,798,919 shares of common stock held by Icahn Partners Master Fund LP (Icahn Master);

(d) 864,865
shares of
common stock
issuable upon
exercise of
warrants held by
High River; (e)
1,660,540 shares
of common stock
issuable upon
exercise of
warrants held by
Icahn Partners
and (f) 1,798,919
shares of
common stock
issuable upon
exercise of
warrants held by
Icahn Master.
Based on the
Company's
review of a
Schedule 13D
filed with the
SEC on
August 5, 2005
(the Icahn 13D)
by High River,
Hopper
Investments,
LLC (Hopper),
Barberry Corp.
(Barberry), Icahn
Master, Icahn
Offshore LP
(Icahn Offshore),
CCI Offshore
Corp. (CCI
Offshore), Icahn
Partners, Icahn
Onshore LP
(Icahn Onshore),
CCI Onshore
Corp. (CCI
Onshore) and
Mr. Carl C.

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Icahn, the Company believes that (a) Barberry, Hopper and Mr. Icahn may be deemed to beneficially own (as that term is defined in Rule 13d-3 under the Exchange Act) the shares (including warrant shares) held by High River; (b) CCI Onshore, Icahn Onshore and Mr. Icahn may be deemed to beneficially own (as that term is defined in Rule 13d-3 under the Exchange Act) the shares (including warrant shares) directly held by Icahn Partners; and (c) CCI Offshore, Icahn Offshore and Mr. Icahn may be deemed to beneficially own (as that term is defined in Rule 13d-3 under the Exchange Act) the shares (including warrant shares) directly held by Icahn Master

because, in each of the foregoing cases, such referenced persons are in a position to directly or indirectly determine the investment and voting decisions of the holder referenced.

Barberry, Hopper, CCI Onshore, Icahn Onshore, CCI Offshore, Icahn Offshore and Mr. Icahn each disclaim beneficial ownership of such shares they may be deemed the beneficial owner of for all other purposes.

- (4) Consists of
 - (a) 4,320,000 shares of common stock held by Mark Capital LLC
 - and (b) 250,000 shares of common stock issuable upon exercise of an option.Mr. Levine is the managing member of Mark Capital LLC.
- (5) Includes 595,833 shares of common stock issuable

upon exercise of
options
currently
exercisable or
exercisable
within 60 days
of the
Evaluation
Date.

(6) Consists of
145,833 shares
of common
stock subject to
options
currently
exercisable or
exercisable
within 60 days
of the
Evaluation
Date.

(7) Consists of
(a) 864,865
shares of
common stock
held by High
River,
(b) 1,660,540
shares of
common stock
held by Icahn
Partners,
(c) 1,798,919
shares of
common stock
held by Icahn
Master,
(d) 864,865
shares of
common stock
issuable upon
exercise of
warrants held by
High River,
(e) 1,660,540
shares of
common stock
issuable upon
exercise of

warrants held by Icahn Partners and (f) 1,798,919 shares of common stock issuable upon exercise of warrants held by Icahn Master. Dr. Denner is a Managing Director of entities affiliated with Mr. Icahn, including Icahn Partners and Icahn Master. Dr. Denner disclaims beneficial ownership of the shares owned by High River, Icahn Partners and Icahn Master except to the extent of his pecuniary interest therein.

- (8) Includes (a) 145,833 shares of common stock subject to options currently exercisable or exercisable within 60 days of the Evaluation Date and (b) 50,000 shares of common stock issuable upon exercise of a warrant held by

Emisphere
Technologies,
Inc.

Dr. Goldberg is
a director of
Emisphere
Technologies,
Inc.

Dr. Goldberg
disclaims
beneficial
ownership of
the shares held
by Emisphere
Technologies,
Inc.

- (9) Consists of 33,333 shares of common stock subject to an option currently exercisable or exercisable within 60 days of the Evaluation Date.
- (10) Includes 145,833 shares of common stock subject to options currently exercisable or exercisable within 60 days of the Evaluation Date.
- (11) Includes 50,000 shares of common stock subject to an option currently exercisable or exercisable within 60 days of the

Evaluation
Date.

- (12) Consists of
 - (a) 391,666 shares of common stock subject to options currently exercisable or exercisable within 60 days of the Evaluation Date
 - and (b) 162,500 shares of common stock held by Dr. Robbins husband.

- (13) Consists of 107,221 shares of common stock subject to options currently exercisable or exercisable within 60 days of the Evaluation Date.

- (14) Consists of 53,124 shares of common stock subject to options currently exercisable or exercisable within 60 days of the Evaluation Date.

- (15) Includes 1,918,676 shares of

common stock
subject to
options
currently
exercisable or
exercisable
within 60 days
of the
Evaluation
Date.

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Set forth below is the name, age, position and a brief account of the business experience of each of the Company's executive officers and significant employees:

| Name | Age | Position |
|---------------------|------------|--|
| Evan M. Levine | 41 | Chief Executive Officer and Director |
| James A. Merritt | 55 | President and Chief Medical Officer |
| Gregory P. Hanson | 60 | Chief Financial Officer, Treasurer and Senior Vice President |
| Joan M. Robbins | 46 | Chief Scientific Officer and Senior Vice President |
| Brian M. Culley | 35 | Chief Business Officer and Senior Vice President |
| Patrick L. Keran | 35 | General Counsel, Secretary and Vice President, Legal |
| Joachim P.H. Schupp | 54 | Vice President, Medical Affairs |
| Michele L. Yelmene | 43 | Vice President, Regulatory Affairs |
| Mark J. Cantwell | 37 | Vice President, Research and Development |

Evan M. Levine. Mr. Levine currently is the Company's chief executive officer, a position he has held since September 2004, and a director, a position he has held since October 2002. Mr. Levine served as the Company's President and Chief Executive Officer from September 2004 through September 2006. From January 2004 until August 2005, Mr. Levine served as the Company's vice chairman and from October 2002 until August 2005 Mr. Levine served as chief operating officer and secretary of the Company. From March 2002 to June 2002, Mr. Levine served as the interim chief executive officer of Digital Courier Technologies, Inc., a provider of advanced e-payment services for businesses, merchants and financial institutions. From 1997 to 2001, he served as managing principal and portfolio manager of Brown Simpson Asset Management, a private equity fund, specializing in structured finance for public companies. From 1996 to 1997, he served as senior vice president of convertible sales and trading at Dillon Read & Company, a financial services company, managing a proprietary convertible portfolio and supervising all institutional sales and trading activity. From 1993 to 1996, he served as vice president of convertible sales and trading at Hambrecht & Quist, a financial services company, where he handled all convertible operations and augmented investment banking and corporate finance revenues through his involvement in the placement of convertible products. From 1992 to 1993, he served as a global arbitrage trader at Spectrum Trading Partners, a financial derivatives trading company, where he was responsible for maintaining market neutral and currency neutral hedges for an international convertible securities portfolio. Mr. Levine has over 18 years of investment banking, venture capital, institutional trading, arbitrage dealing, and senior corporate management experience. He played key roles in the deployment of over \$1 billion of investment capital into the health care and technology sectors. Mr. Levine received his B.A. in Economics and Finance from Rutgers University and has completed graduate coursework for an M.B.A. at New York University's Stern School of Business.

James A. Merritt, M.D. Dr. Merritt currently is the Company's president and chief medical officer, positions he has held since September 2006. From July 2005 through September 2006, Dr. Merritt consulted for the Company acting as chief medical advisor on various clinical matters. From 2003 to September 2006, Dr. Merritt had been chief executive officer and a member of the board of directors of Imagine Pharmaceuticals, a privately-held venture-backed biotechnology company focused on the development of small molecules that enable the delivery of cancer therapeutics to metastatic and primary brain tumors. From February 1996 to 2003, Dr. Merritt held various positions at Introgen Therapeutics, a biopharmaceutical company focused on the discovery, development and commercialization

of targeted molecular therapies for the treatment of cancer and other diseases, most recently as its chief medical officer. Dr. Merritt has more than 20 years experience in drug development and

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has held senior positions, including at Introgen Therapeutics, Viagene and IDEC Pharmaceuticals. Dr. Merritt holds an M.D. from the University of Vermont and a B.A. from Johns Hopkins University. Dr. Merritt completed a research fellowship in viral oncology and a clinical fellowship at the University of Wisconsin, Madison, Department of Human Oncology, and holds board certifications in internal medicine and medical oncology.

Gregory P. Hanson, M.B.A., C.M.A. Mr. Hanson currently is the Company's chief financial officer and treasurer and a senior vice president, positions he has held since December 2006. Prior to this appointment, Mr. Hanson served as vice president and chief accounting officer of Avanir Pharmaceuticals, Inc., a publicly traded drug discovery and development company, from May 2006 to December 2006 and as vice president and chief financial officer of Avanir from July 1998 to May 2006. Also during Mr. Hanson's tenure at Avanir, he simultaneously served in other executive capacities, including corporate compliance officer since 2002 and corporate secretary since July 1998. From September 1995 to July 1998, Mr. Hanson served as chief financial officer of XXsys Technologies, Inc., a publicly-traded company focused on the commercialization of advanced composite technologies; and from May 1993 to September 1995, he held a number of financial positions with The Titan Corporation, a diversified telecommunications and information systems company, including acting chief financial officer and acting controller for its subsidiary, Titan Information Systems. Earlier in his career, Mr. Hanson held various management positions with Ford Motor Company over a 14-year span and Solar Turbines Incorporated, a subsidiary of Caterpillar Inc., over a 3-year span. Mr. Hanson received a B.S. in mechanical engineering from Kansas State University and an M.B.A. with honors from the University of Michigan. He is a certified management accountant and has passed the examination for certified public accountants. Mr. Hanson has been a member of the Financial Accounting Standards Board's Small Business Advisory Committee since April 2004 and serves on its agenda committee.

Joan M. Robbins, Ph.D. Dr. Robbins currently is the Company's chief scientific officer and a senior vice president, positions she has held since January 2007. Dr. Robbins served as the Company's chief technical officer from March 2003 to January 2006, and was appointed executive vice president and chief science officer in February 2006. From 1996 to 2003, Dr. Robbins was employed by Immusol, Inc., a biopharmaceutical company specializing in anticancer and antiviral therapeutics in addition to certain dermatologic and ophthalmic disorders. At Immusol, she held several positions, including vice president, product development, senior director, product development, and director, therapeutics. Dr. Robbins has directed drug discovery and development resulting in the advancement of drug candidates into Phase 1, 2 and 3 human trials, including the development of clinical protocols with the U.S. Food and Drug Administration. She has also led programs for formulation, manufacturing, toxicology and pharmacology development. From 1994 to 1995, she was research scientist and project leader for cancer research at Chiron where she led development of gamma-IFN recombinant retroviral immuno-gene therapy for cancer, and tk-recombinant retroviral gene therapy for brain tumors. From 1992 to 1993, Dr. Robbins was a post graduate researcher at University of California, San Diego, where she assisted in the development of a novel DNA-based immunotherapeutic for treatment of Her2/neu expressing tumors. From 1990 to 1991, she was a research fellow at the Garvin Institute for Medical Research, Centre for Immunology in Sydney, Australia, and from 1981 to 1989, Dr. Robbins was a microbiologist at the Laboratory of Tumor Immunology and Biology at the National Cancer Institute in Bethesda, Maryland. Dr. Robbins received her B.S. in genetics from the University of California, Davis, and a Ph.D. in genetics from George Washington University, Washington D.C.

Brian M. Culley, M.S., M.B.A. Mr. Culley currently is the Company's chief business officer and a senior vice president, positions he has held since January 2007. Mr. Culley served as vice president, business development since joining us in December 2004, and was appointed senior vice president, business development in February 2006. From 2002 until 2004, Mr. Culley managed all strategic collaborations and licensing agreements for Immusol, Inc. in San Diego, where his most recent title was director of business development and marketing. From 1999 until 2000, he was a licensing and marketing associate at the University of California, San Diego, department of technology transfer & intellectual property services and from 1996 to 1999, he was a research associate for Neurocrine Biosciences, Inc., where he performed drug discovery research. Mr. Culley has over 12 years of experience in the biotechnology industry, including deal structure and negotiation, licensing, due diligence, market and competitive research, and venture funding. He received an M.S. in biochemistry from the University of California Santa Barbara and an M.B.A. from The Johnson School of Business at Cornell University with an emphasis on private equity and entrepreneurship.

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Patrick L. Keran, J.D. Mr. Keran currently is the Company's general counsel, a position he has held since August 2006, secretary, a position he has held since September 2006, and vice president, legal, a position he has held since January 2007. From April 2004 to August 2006, Mr. Keran was associate general counsel at Isis Pharmaceuticals, a publicly traded drug discovery and development company. From February 2003 to April 2004, Mr. Keran practiced corporate law at the law firm of Heller Ehrman LLP, specializing in public and private financings, licensing arrangements, mergers and acquisitions and corporate governance matters. From September 1999 to February 2003, Mr. Keran practiced law at the law firm of Brobeck Phleger & Harrison LLP where he had a similar corporate practice. Mr. Keran is licensed to practice law in the State of California. Mr. Keran received a B.A. from the University of California at San Diego and a J.D. from the University of California at Berkeley, Boalt Hall School of Law.

Joachim P.H. Schupp, M.D. Dr. Schupp currently is the Company's vice president, medical affairs, a position he has held since August 2006. From October 2004 to August 2006, Dr. Schupp served as vice president of clinical business solutions and clinical data services at ProSanos Corporation, a company specialized in the capture, integration and analysis of healthcare related data with a focus on post-approval and pharmacovigilance studies. From 1985 to October 2004, Dr. Schupp held various positions at Novartis AG and Ciba Geigy (which merged with Sandoz to form Novartis in 1996), most recently as executive director of project management. Dr. Schupp has more than 20 years experience in the global pharmaceutical industry. As global project leader at Novartis, he was responsible for life cycle management of numerous projects and compounds in oncology, dermatology and wound healing, including several first-of-kind therapeutics. In this executive director position within project management, his team leadership is credited for the market approval of several drugs, including Femara[®] in the United States and European Union for breast cancer and Apligraf[®] in the United States for venous and diabetic ulcers, and for the international development of Exjade[®], recently approved for transfusional hemosiderosis. Dr. Schupp was a clinical research physician at Ciba Geigy where he directed international teams in the therapeutic area of inflammation. He received his M.D. from the Free University of Berlin and served for several years on the faculty at the University of Pretoria, South Africa prior to joining Ciba Geigy.

Michele L. Yelmene. Ms. Yelmene currently is the Company's vice president, regulatory affairs, a position she has held since March 2007. From October 2006 to March 2007, she consulted for the Company regarding various regulatory matters. From April 2002 through March 2006, Ms. Yelmene was executive director, clinical and regulatory affairs and corporate secretary for Perlan Therapeutics, a privately-held company focused on development of recombinant protein-based drugs. From 1998 until 2002, Ms. Yelmene was director in biomedical operations for Genzyme Corporation, a leading biotechnology company focused on rare inherited disorders, kidney disease, orthopaedics, cancer, transplant and immune diseases, and diagnostic testing, and from 1996 through 1998 she was manager of medical and regulatory affairs for Mallinckrodt, a publicly-traded pharmaceutical company acquired by Tyco Healthcare. Ms. Yelmene brings over 25 years of operational and project management, clinical and scientific research and regulatory affairs experience in the biotechnology and pharmaceutical industries. During her career, Ms. Yelmene was responsible for clinical development, preparation, and presentation of 14 FDA-approved products and over 25 investigational new drug applications (INDs) for both pharmaceutical and biologics-based therapies in the areas of viral infections, respiratory, CNS, metabolic and endocrine diseases, and lysosomal storage disorders. She has participated in meetings with the FDA at all phases (pre-IND through advisory committee) of clinical development. Ms. Yelmene is a member of the Regulatory Affairs Professional Society, Drug Information Association and Co-Chair of the FDA Committee at BIOCOCOM in San Diego. She received a B.S. in biology and B.A. in English writing, both from Rider University.

Mark J. Cantwell, Ph.D. Dr. Cantwell currently is the Company's vice president, research and development, a position he has held since January 2006. Dr. Cantwell joined the Company as director of preclinical programs in November 2003. From 1998 to 2003, Dr. Cantwell was employed at Tragen Pharmaceuticals, formerly Immunogenex Inc., a company specializing in immune therapies for cancer and autoimmune diseases. While at Tragen, Dr. Cantwell was a staff scientist involved in the preclinical development of Tragen's drug candidates. Dr. Cantwell received a Ph.D. from the University of California, San Diego and a B.S. in applied biology from the Georgia Institute of Technology.

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CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The Company has incorporated into its written review and approval policies certain procedures designed to ensure that transactions between the Company and any of its directors, executive officers, holders of more than 5% of its common stock, or any member of the immediate family of any of the foregoing, is reviewed by individuals within the Company (including its general counsel) familiar with the requirements of Item 404 of Regulation S-K promulgated by the SEC. In the event any such transaction is proposed, the Company's policies are designed to ensure these individuals are involved in the review of the transaction. If the transaction would require disclosure pursuant to Item 404(a), the transaction will be presented to the audit committee for review and, if appropriate, approval.

In the last fiscal year, there has not been nor currently are there proposed any transactions or series of similar transactions to which the Company was or is to be a party in which the amount involved exceeds \$120,000 and in which any director, executive officer, holder of more than 5% of the Company's common stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than the following transactions:

Issuances of Stock Awards

In 2006, the Company granted options to purchase an aggregate of 1,335,000 shares of the Company's common stock to its directors and executive officers at a weighted average exercise price of \$3.56 per share. The exercise price per share of underlying common stock for each of the options issued to such parties was equal to the fair market value per share of the Company's common stock on the date of grant.

In April 2006, the Company issued Dr. Merritt 5,000 shares of the Company's common stock. Information regarding this issuance is located under the caption "Grants of Plan-Based Awards," below.

Employment Agreements

In September and December 2006, the Company entered into employment agreements with, respectively, Dr. Merritt, its president and chief medical officer, and Mr. Hanson, its chief financial officer and treasurer and a senior vice president. Information regarding these employment agreements is located under the caption "Potential Payments Upon Termination or Change In Control," below.

Separation Agreements

In September 2006, the Company entered into a separation agreement and release of all claims and a consulting agreement with Carrie E. Carlander, its former chief financial officer. Information regarding these agreements is located under the caption "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table," below.

In February 2007, the Company entered into a separation agreement and release of claims and a consulting agreement with Robert A. Daniel, its former acting chief financial officer. Information regarding these agreements is located under the caption "Potential Payments Upon Termination or Change in Control," below.

Indemnification of Officers and Directors

The Company's amended and restated certificate of incorporation and its bylaws provide that the Company will indemnify each of its directors and officers to the fullest extent permitted by the Delaware General Corporation Law. Further, the Company has entered into indemnification agreements with each of its directors and officers, and has purchased a policy of directors' and officers' liability insurance that insures its directors and officers against the cost of defense, settlement or payment of a judgment under certain circumstances.

Table of Contents*Other Transactions*

In September 2006, the Company entered into a First Amendment to Rights Agreement with certain entities affiliated with Mr. Icahn. The amendment amended certain terms of the underlying agreement in connection with the appointment of Mr. Lief to the Board.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Under Section 16(a) of the Securities Exchange Act of 1934 (the Exchange Act) and SEC rules, the Company's directors, executive officers and beneficial owners of more than 10% of any class of equity security are required to file periodic reports of their ownership, and changes in that ownership, with the SEC. Based solely on its review of copies of these reports and representations of such reporting persons, the Company believes that during fiscal year 2007, such SEC filing requirements were satisfied, except for late filings made by Dr. Merritt, the Company's president and chief medical officer, and Mr. Daniel, the Company's former acting chief financial officer, who each inadvertently filed a late Form 3 on September 19, 2006 reporting their status as reporting persons on September 7, 2006.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides information as of December 31, 2006 regarding equity compensation plans approved by the Company's stockholders. The Company does not have any equity compensation plans that have not been approved by its stockholders.

| | Number of securities to be issued upon exercise of outstanding options, warrants and rights | Weighted-average exercise price of outstanding options, warrants and rights | Number of securities available for future issuance under equity compensation plans (excluding securities reflected in second column) |
|-----------------------------------|---|---|--|
| Plan | | | |
| 2005 Equity Incentive Plan | 3,733,769 | \$ 2.37 | 2,487,220(1) |
| 2005 Employee Stock Purchase Plan | 0 | \$ 0 | 1,673,634(2) |

- (1) The 2005 Equity Incentive Plan contains a provision for an automatic annual increase in the number of shares available for grant on the first day of the Company's fiscal year beginning in 2006 equal to the lesser of (i) one percent of the number of

outstanding shares of the Company's common stock on such day, (ii) 750,000 and (iii) such other amount as the Board may specify prior to the date such annual increase is to take effect.

- (2) The 2005 Employee Stock Purchase Plan contains a provision for an automatic increase in the number of shares available for grant on the first day of the Company's fiscal year beginning in 2006 and on each anniversary of that date thereafter equal to the lesser of (i) one percent of the number of outstanding shares of the Company's common stock on such day, (ii) 750,000 and (iii) such other amount as the Board may specify prior to the date such annual increase is to take effect.

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EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

General Philosophy, Overview and Objectives

The Company's compensation programs are intended to attract, motivate and retain highly qualified executives and to be competitive with those companies the Company considers its peers. The Company competes for executive talent with a number of large, well established pharmaceutical and biotechnology companies who, among other things, enjoy significantly greater name recognition, superior resources and deeper industry connections. The Company's executive compensation programs are meant to assist in creating stockholder value by attracting highly qualified talent, promoting achievement of individual and company wide performance goals and retaining the Company's executives by rewarding achievement of superior performance.

The Company's process for evaluating and determining the competitiveness of its compensation packages for executives has evolved as the Company's operations have grown increasingly sophisticated and the caliber of executive it seeks has risen. Historically, the Company relied on generally-available surveys and data-compilations to assess the competitiveness of its compensation practices. The Company is now at a stage where it believes it is appropriate to seek advice from qualified professionals that is both more comprehensive and current and tailored specifically to the Company and its industry. Accordingly, in February 2007, the compensation committee retained Frederic W. Cook & Co., Inc., a nationally-recognized compensation consulting firm, to assist in evaluating the Company's compensation practices.

F.W. Cook's analysis revealed that the Company historically has paid its executives below the median with respect to its peer group of similarly situated biotechnology companies identified by F.W. Cook and the metrics F.W. Cook uses to assess the competitiveness of executive compensation, such as base salary, cash bonus and stock options. The Company believes the median level of compensation for a particular executive does not by itself determine the appropriate level of compensation for that particular executive. Overall, the Company believes its executives are fairly compensated. The Company will carefully evaluate whether continuing to pay below the median identified by F.W. Cook may impede its ability to attract, motivate and retain highly qualified executives and otherwise remain competitive in the market.

Compensation Program and Process

The compensation committee establishes and oversees the Company's executive compensation programs. The compensation committee meets several times a year to review, analyze and set compensation packages for the Company's executives.

The Company's executives currently are compensated primarily through salary and long term incentive awards in the form of stock options. Executives also participate in the Company's other benefit programs, such as health and welfare benefits, group term life and short and long term disability insurance and matching contributions under the Company's tax-qualified 401(k) program, at the same level as other employees. In addition, beginning in 2007, the Company purchased individual long term disability insurance policies for each of its executives to supplement the benefit provided by its group long term disability insurance. Typically, shortly following the beginning of each calendar year, the Company's chief executive officer will evaluate performance of both the Company and its individual executives during the preceding year and make recommendations to the compensation committee with respect to compensation of the Company's executives, other than himself, which recommendations the compensation committee analyzes in the process of determining appropriate compensation packages for individual executives.

The starting point in determining base salary compensation of the Company's executives is the comparable median salary of executives at those companies the Company considers its peers. The Company's chief executive officer will adjust the comparable median salary to reflect the skills, experience, knowledge and responsibilities of the applicable Company executive, the executive's performance against corporate and individual objectives for the prior year, expected contributions in achieving future corporate goals and performance (including changes in

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responsibility, title or position), contributions as a member of the executive management team, current compensation and any recently granted stock options, compensation equality within peer groups and the Company generally, corporate performance and the overall condition of the Company, all of which is considered in the context of general industry and economic conditions. Historically, including in 2006 and (other than with respect to the Company's chief executive officer) 2007, in assessing comparable median salaries, the Company relied on the annual survey conducted by The Biotech Employee Development Coalition (which focuses primarily on biotechnology companies located in Southern California). The compensation committee carefully considers the analysis of the Company's executives as provided by its chief executive officer, as well as his ultimate recommendation, in determining pay packages and makes any adjustments based on its interpretation of the same criteria.

In establishing the elements and levels at which the Company compensates its executives, the Company does not base its decisions on the short term performance of the Company's stock, whether favorable or unfavorable; rather, the Company believes that the price of its stock will, in the long-term, reflect the success the Company achieves in its pre-clinical and clinical programs. The Company believes its long term incentive award compensation in the form of stock options promotes achieving specific annual and long term strategic goals with respect to the Company's pre-clinical and clinical programs, with the ultimate objective of increasing stockholder value over the long term.

In determining long term incentive award compensation, the initial stock option award to an executive is based on the size of awards made to comparable executives within the Company (based on title, responsibility, salary and other similar factors). Annual refresher stock option awards are based on the criteria described above that the Company's chief executive officer and the compensation committee consider in adjusting median salaries, as well as the mix of vested versus unvested and in-the-money versus underwater stock options held by the executive. Consideration may also be given to whether stock options expired unexercised (including as a result of being out-of-the-money for substantial periods during the term of the option or upon its expiration).

Under this process, compensation of the Company's executives, other than its chief executive officer, was established for 2006 and 2007.

Since becoming the Company's chief executive officer in September 2004 and until March 2007, other than changes in benefits available to all employees, Mr. Levine's compensation had not been changed. In November 2005, Mr. Levine entered into an agreement with certain entities affiliated with Mr. Icahn (the Icahn Entities). Under the agreement, Mr. Levine is prohibited from, among other things, except with the consent of a majority of the Board (including the director designated by the Icahn Entities), accepting or requesting any increase in the amount of compensation payable by the Company to Mr. Levine. The Company is not a party to the agreement and has no rights or obligations thereunder. Neither the Company nor the Board approved, authorized or ratified the agreement.

In February 2007, the compensation committee retained F.W. Cook, a compensation consultant that had not previously conducted any business directly with the Company. F.W. Cook was charged with, among other things, conducting a competitive assessment of the Company's executive compensation, in particular that of the Company's chief executive officer. In addition to talking with members of the compensation committee, F.W. Cook contacted certain of the Company's executives and employees in the Company's human resources, finance, business development and investor relations departments to obtain historical data and insight into previous compensation practices and to establish the Company's peer group.

In February 2007, F.W. Cook presented to the compensation committee its analysis of the Company's chief executive officer's compensation, which it found to be below the median of a chief executive officer within the Company's peer group based on the metrics F.W. Cook uses to assess the competitiveness of executive compensation.

In March 2007, the Board (including the director designated by the Icahn Entities) reviewed Mr. Levine's performance in 2006 and approved certain aspects of a compensation package for Mr. Levine for 2007. In particular, Mr. Levine's annual base salary was increased from \$250,000 to \$450,000 (which represents the median salary of a chief executive officer within the Company's peer group established by F.W. Cook), which salary increase was made retroactive to January 1, 2007. In addition, Mr. Levine was awarded a cash bonus of \$100,000 (which

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represents approximately the 25th percentile of actual bonus paid to a chief executive officer within the Company's peer group established by F.W. Cook) in recognition of his performance in 2006. This bonus was not pursuant to any plan or program and, immediately prior to awarding such bonus, the Company had no obligation to pay Mr. Levine this or any other bonus. The Board also authorized the chair of the compensation committee to, with the advice and assistance of F.W. Cook, negotiate additional terms of Mr. Levine's continued employment, including a 2007 cash bonus target of \$250,000 (which represents approximately the 75th percentile of actual bonus paid to a chief executive officer within the Company's peer group established by F.W. Cook) based on achieving pre-established objectives to be determined by the compensation committee and such other terms as the compensation committee, in consultation with F.W. Cook, determines are reasonable. Mr. Levine's ability to accept any future increase in the amount of compensation payable by the Company to him may require the consent of a majority of the Board (including the director designated by the Icahn Entities).

In assessing the appropriate level of compensation for Mr. Levine, a majority of the Board believed it was inappropriate to consider Mr. Levine's beneficial ownership of the Company's shares, which was acquired by him through a personal investment (through an investment vehicle he controls) and, as of the Evaluation Date, is equal to 5.0% of the Company's outstanding shares. The Board applied the same general criteria described above in determining Mr. Levine's compensation as is applied to other executives in determining their respective compensation. The Board considered the fact that Mr. Levine's ownership stake in the Company resulted from an arms-length investment, for which Mr. Levine bore the investment risk, made prior to his appointment to his current position with the Company. In negotiating the terms of the grant of a stock option, if any, to Mr. Levine, the Company may consider that Mr. Levine's ownership position in the Company is not dependent on his providing on-going services to the Company. A member of the Board believed it was appropriate to consider Mr. Levine's ownership stake in the Company in determining the appropriate level of compensation for Mr. Levine and assessing whether he has adequate incentives and is properly motivated both to continue in his role as the Company's chief executive officer and maximize stockholder value, but determined that the compensation package ultimately approved by the Board was appropriate in light of the overall circumstances.

In March 2007, F.W. Cook completed its analysis of the Company's executive's compensation generally. F.W. Cook's analysis revealed that, relative to its peer group, the Company generally pays its executives below the median with respect to the metrics F.W. Cook uses to assess the competitiveness of executive compensation.

The Company believes, however, that its executives, taking into consideration the adjustments it has made and is contemplating with respect to its chief executive officer, generally are fairly compensated and provided with adequate incentives and properly motivated to maximize stockholder value. Many of its executives are recent hires with limited tenure. Many are in their first executive position. Overall, the Company believes its executives are satisfied with their respective compensation packages and that current compensation is sufficient to ensure their continued services as motivated employees. The Company is aware, however, that a consistent practice to compensate executives below the median may impede its ability to attract and retain qualified executives. As the Company's current executives gain experience and tenure and demonstrate their value over an extended period, it may be difficult to retain their services if the Company does not compensate them in a manner consistent with the compensation of executives within the Company's peer group.

In addition, in recent years, the Company has undergone significant growth and development, which has affected the make-up of those companies it considers its peers. As the Company matures, its peer group evolves and the compensation practices of its peer group changes. The Company intends periodically to review and reassess the appropriateness of its compensation practices and the level at which it compensates its executives to ensure it continues to attract, motivate and retain highly qualified employees. For instance, the compensation committee is considering the implementation of plans under which it may grant short term awards consisting of annual cash bonuses and severance and change in control benefits, as well as the appropriate benchmark against which to assesses the competitiveness of its compensation.

Elements of Compensation

Currently, the elements of the Company's overall executive compensation packages consist of base salary and long term incentive awards in the form of stock options, as well as other benefits available generally to employees and

typical of companies at the Company's stage of development, such as health and welfare benefits,
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group term life and short and long term disability insurance and matching contributions under the Company's tax-qualified 401(k) program. In addition, beginning in 2007, the Company purchased individual long term disability insurance policies for each of its executives to supplement the benefit provided by its group long term disability insurance. The Company structures the elements of its executives' overall compensation to compensate them for their day-to-day activities as executives and provide incentive for increasing long term stockholder value.

Peer Group

In February 2007, the compensation committee, in concert with F.W. Cook and with feedback from the Company's management, established a peer group consisting of 19 biotechnology companies of similar size and nature of operations. In determining its peer group and the competitiveness of the various elements of compensation it offers executives, the Company considered not only those companies comparable in terms of market capitalization, stage of development and employee base, but also those companies against which it competes for talent. Though streamlined in terms of number of employees and certain other quantitative metrics, the Company has a complex drug development cycle that requires executives to possess a detailed and comprehensive understanding of and the interdynamics among numerous disciplines. Under the provisions of Section 505(b)(2) of the Federal Food, Drug and Cosmetic Act, certain of the Company's product candidates may move from preclinical development to approved product on timelines substantially faster than those associated with traditional drug development. In addition, the Company has numerous active preclinical and clinical development programs, and is evaluating several other of its assets in various other programs. Demand is high for individuals with the experience to effectively manage and finance an organization reflecting the Company's breadth and depth, and this experience is often found only among executives and other high-ranking employees at companies with significantly greater market capitalization, numbers of employees and other quantifiable metrics than the Company's current comparable metrics. In addition, the Company seeks to retain executives capable of guiding the Company through its next several stages of growth and development, when many of its quantitative metrics will be substantially greater.

The market from which the Company draws and anticipates continuing to draw executive talent is national in scope (and, in certain instances, international). Accordingly, the Company does not focus on the geographical location of companies in establishing its peer group and, specifically, does not limit its focus to companies in San Diego, California. To the extent the Company does incorporate competitive market data from specific geographical locations, it focuses in part on the San Francisco Bay Area and the Boston, Seattle and Raleigh-Durham metropolitan areas, areas that typically have compensation levels higher than the national average.

Over time, the composition of the Company's peer group is likely to evolve to reflect changes in the Company's development and prospects.

Base Salary

The Company provides base salary to its executives to compensate them for day-to-day services rendered throughout the year. Historically, in assessing the competitiveness of the salaries it offers, the Company relied primarily on the annual survey conducted by The Biotech Employee Development Coalition (which focuses primarily on biotechnology companies located in Southern California). In the near term, the Company anticipates assessing the baseline competitiveness of each of its executives' salaries by comparing it against the peer group established by the compensation committee in cooperation with F.W. Cook. From this starting point, the Company will determine the appropriate level of base salary for particular executives applying the factors and considerations described above.

At least annually, the compensation committee will review and assess the performance of the Company's chief executive officer outside of his or her presence and determine appropriate changes, if any, to base salary compensation. Mr. Levine may be prohibited from accepting any increase in the amount of compensation payable by the Company to him, except with the consent of a majority of the Board (including the director designated by the Icahn Entities).

In addition, shortly following the Company's internal assessment of individual performance for a particular year, the Company's chief executive officer will make base salary recommendations to the compensation committee with respect to all other executives, which recommendations the compensation committee will discuss outside the

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presence of the affected executives and ultimately accept or adjust (including reject). In January 2007, the compensation committee approved base salary adjustments for certain of the Company's executives, including three of the Named Executive Officers. Dr. Merritt, the Company's president and chief medical officer, received a 11.5% increase; Dr. Robbins, the Company's chief scientific officer, received a 6% increase; and Mr. Culley, the Company's chief business officer, received a 25% increase. Based in part on generally-available surveys and data compilations, the Company's chief executive officer typically sets base salaries for all non-executive employees in his or her discretion based on recommendations and with input from other executives, subject to the compensation committee's approval of the aggregate increase in the Company's compensation to its employees.

Short Term Incentive Awards

Short term incentive awards are designed to encourage the achievement of key near-term corporate goals that will enhance long term performance and reward corporate and individual performance in a particular year. Corporate goals typically are milestone-based and tied to events that a company determines will drive overall stockholder value, such as initiating, enrolling patients in and completing clinical trials; submitting, filing and obtaining approval of regulatory documents; partnering and other commercialization activities; and developing and expanding a company's portfolio of products and product candidates. Corporate goals may also reflect appropriate financial metrics, such as levels of operating cash at year-end and successfully closing capital-raising transactions, and other near term objectives the achievement of which a company wishes to encourage. Individual goals typically are designed to foster attaining near term corporate goals and other desired objectives.

Under a typical program, payment of short term incentive awards will depend on the level of achievement of these pre-established corporate and individual goals, calculated as a percentage of the participant's salary, with higher-ranking participants compensated at a higher percentage of salary.

The Company does not have a formal short term incentive plan and, to date, the payment of any cash bonuses to the Company's executives has been at the discretion of the compensation committee. From 2003 through 2006, the Company did not award cash bonus compensation to any of its employees, including its executives, other than a signing bonus of \$20,000 paid in September 2006 to its vice president, medical affairs. In January 2007, the Company awarded a one-time payment of \$37,500 to its president and chief medical officer and, in March 2007, the Company awarded a one-time payment of \$100,000 to its chief executive officer. The 2007 awards were not pursuant to any plan or program and, immediately prior to awarding such bonus, the Company had no obligation to pay these or any other bonuses to these individuals.

According to F.W. Cook's analysis, total annual compensation (i.e., base salary plus bonus actually paid) to the Company's executives (not including its chief executive officer) is, in the aggregate, 25% below the median total annual compensation of executives of companies within the Company's peer group. In light of F.W. Cook's analysis, the compensation committee has discussed the payment of cash bonuses based on the achievement of corporate and individual goals, and the Board has formally approved a target bonus of \$250,000 for the Company's chief executive officer, subject to negotiating the specific goals related to the achievement of such bonus. Neither the compensation committee nor the Board has approved any bonus target (whether as a percentage of base salary or a dollar amount) for any of the Company's other executives. The Company believes, however, that the combination of continued base salary compensation and long term incentive compensation it provides its executives currently is adequate to provide incentive to the Company's executives to achieve short term corporate goals. However, as the Company continues to mature, the Company believes the need for a formal short term incentive plan that rewards performance and provides incentive to executives to achieve specific, tailored goals may evolve.

The Company anticipates that any corporate goals underlying short term incentive awards and, if applicable, individual goals of the Company's chief executive officer will be proposed to the compensation committee by the Company's chief executive officer, which proposal the compensation committee may choose to accept or adjust (including reject). Corporate goals likely will be specific and measurable and individually weighted with respect to all corporate goals. Individual goals, if applicable, for the Company's other executives likely will be proposed by individual executives and recommended to the compensation committee by the Company's chief executive officer.

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The Company anticipates that, during the first quarter of each year, the compensation committee will assess the Company's performance during the course of the prior year and the level of achievement of established corporate and, if applicable, individual goals of the Company's executives based on recommendations proposed to the compensation committee by the Company's chief executive officer, which recommendations the compensation committee may choose to accept or adjust (including reject). In assessing achievement of corporate and individual goals, the compensation committee likely will consider not only whether or not the specific corporate goal was achieved, but also the degree to which the goal was achieved, the quality of achievement, the difficulty and likelihood of achieving specific goals, the performance by the Company's executives in light of unexpected and adverse conditions and other factors it determines are appropriate to consider.

Long Term Incentive Awards

The Company provides long term incentive awards to executives as a form of compensation, to align their respective interests with those of stockholders, as a means to retain personnel and to fulfill expectations regarding overall compensation. These awards provide, among other things, incentive to recipients to appropriately balance short and long term goals, thereby maximizing long term value for the Company and its stockholders.

The compensation committee periodically evaluates the form of long term incentive awards to ensure it is an appropriate vehicle to achieve the underlying purpose of long term incentive awards. Historically, the compensation committee determined that stock options, as opposed to stock appreciation rights, performance units, restricted stock, restricted stock units, stock issuances or combinations thereof, currently provide an appropriate and effective means to achieve the multi-faceted purposes underlying long term incentive awards. The Company is a growth-oriented company and stock options, whose entire value resides in the appreciation in value of the underlying stock, align well with the Company's corporate stage of development, as well as the longer timelines associated with drug development. Several companies, including some within the Company's peer group, are shifting the form of their long term incentive awards towards restricted stock, which typically provide the recipient immediate value on vesting. As a result of the immediately-realized value typical of restricted stock awards, the size of restricted stock awards typically are smaller than comparable stock option awards. Relative to stock options, restricted stock places greater emphasis on maintaining or steadily growing market value and is, therefore, a less appropriate and less effective means of effecting the Company's purposes in providing long term incentive awards. The compensation committee will continue to evaluate the appropriateness and effectiveness of stock options as the vehicle to implement the Company's goals in providing long term incentive awards.

Beginning in 2006 the accounting treatment for stock options changed as a result of Revised Statement of Financial Accounting Standards No. 123, making the accounting treatment of stock options less attractive. As a result, the Company assessed the desirability of utilizing other forms of equity compensation. Based on the Company's internal assessment of the motivational power of stock options, its financial position and the growth-oriented stage of its development and advice from outside experts, the Company determined to continue relying on stock options as the Company's primary form of equity incentive for 2007.

The Company typically grants an initial stock option to new employees and provides deserving employees (including, if applicable, the Company's executives) annual refresher grants to reward superior corporate and individual performance. Currently, the Company grants stock options under its 2005 Equity Incentive Plan, which options typically vest and become exercisable monthly over 48 months from the vesting start date except that no shares vest or become exercisable for the first 12 months and, on the 12-month anniversary of the vesting start date, 25% of the shares vest and become exercisable; however, the Company's 2005 Equity Incentive Plan allows for other vesting periods and the Company has granted employees stock options that are structured in this general manner but vest and become exercisable over 36, rather than 48, months, and the Company has granted its directors stock options that vest and become exercisable over 12, rather than 48, months.

To assess the competitiveness of the Company's past stock option awards to its executives, F.W. Cook analyzed the carried interest of the Company's executives as a result of Company-provided awards. With respect to a company, carried interest is the sum of the number of shares underlying stock options held by an executive, the number of shares of the company's common stock held by such executive and the number of shares of common stock sold by such executive during the prior 3 years, in each case as a result of company-provided awards, expressed as a percentage of

the number of shares of the company currently outstanding. F.W. Cook determined that

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the carried interest of each of the Company's executives is below that of comparable executives of companies within the Company's peer group. F.W. Cook did note that part of this discrepancy could be attributed to the fact that several of the Company's executives were recently hired.

To assess the competitiveness of the Company's annual refresher stock option awards to its executives, F.W. Cook calculated the median number of shares that each company within the Company's peer group makes available for awards to employees on an annual basis, as a percentage of the number of shares of the company currently outstanding, and the median allocation (reflected as a percentage) of that amount to comparable executives of companies within the Company's peer group. Based on this analysis, F.W. Cook determined the annual refresher stock option award to the Company's executives (other than its chief executive officer) in January 2007 is, in the aggregate, below the median. F.W. Cook's analysis indicated, however, that the Company's small employee base relative to the companies in its peer group may warrant reserving a smaller number of shares for awards to employees. In this case, the median allocation would be tied to a smaller number and, accordingly, the annual refresher stock option award to the Company's executives may be closer to the median.

F.W. Cook noted that many of the Company's stock option awards appear large in an absolute sense but should be viewed in context and relative to the number of shares currently outstanding. Relative to the companies within the Company's peer group, the Company has approximately three times the number of shares outstanding. Accordingly, to reflect comparable value, a stock option award provided to the Company's executives must be three times as large as that provided to a comparable executive of companies with the Company's peer group. The compensation committee believes, however, that the stock options granted to the Company's executives are sufficient to adequately link their interests to the long term success of the Company and to create the appropriate motivation for achieving such long term success.

The Company's ability to grant stock options currently is subject to the Rights Agreement. The parties to the Rights Agreement have, among other things, the right to participate in future issuances by the Company of certain of its securities, including stock options. This right, however, does not apply to, among other things, 4,500,000 shares (including shares underlying stock options) issued or issuable to officers, employees directors or consultants of the Company under incentive plans, provided no more than 900,000 of such shares are issued in any 12-month period beginning July 27, 2005. Since July 27, 2005 through March 31, 2007, including stock options granted after July 27, 2005 as replacements for stock options granted prior to July 27, 2005, the Company granted options to purchase an aggregate of 3,883,333, and issued 75,145, shares of the Company's common stock under its incentive plans. Historically, the Company has requested and received waivers with respect to the annual limitation. However, if the Company is unable to obtain in a timely manner on-going waivers of, or an amendment to, the annual and, if applicable, aggregate limitation, its ability to attract new and retain existing employees and to properly motivate them may be impaired.

Other Compensation

The Company provides health and welfare benefits, group term life and short and long term disability insurance and a tax-qualified 401(k) program generally to all eligible employees, and the executive officers may participate in these programs in the same fashion as all other eligible employees. In addition, beginning in 2007, the Company purchased individual long term disability insurance policies for each of its executives to supplement the benefit provided by its group long term disability insurance.

The Company also offers assistance to all employees, including its executives (a) in connection with their obligations under Sections 13 and 16 of the Exchange Act and the rules and regulations promulgated thereunder and (b) in establishing stock trading plans designed to comply with Rule 10b5-1 promulgated by the SEC.

The Company also provides vacation benefits to its executives, which typically are greater than provided generally to employees. The Company's employees generally accrue 10 vacation days per year. The Named Executive Officers accrue the following number of vacation days per year: the chief executive officer: 23 days; the president and chief medical officer: 30 days; the chief financial officer: 20 days; the chief scientific officer: 23 days; and the chief business officer: 22 days.

Table of Contents*Severance and Change in Control*

The Company believes it is in its and its stockholders interest to provide certain executives certain benefits in the event the Company terminates them without cause or its executives voluntarily resign with good reason. During reductions-in-force (a not infrequent event in the industry in which the Company competes) severance benefits provide executives a degree of financial security that enhances their ability to remain focused on the Company and its operations, as opposed to seeking other employment. Severance benefits, which typically are conditioned on the departing executive executing a release of the executive's claims against the company, help protect the company and facilitate the separation process by negotiating the terms of separation at a time when the underlying issues resulting in the separation likely have not materialized. Significant management distraction and legal expense can be avoided by establishing in advance the terms of separation.

In the context of a change in control, the Company believes executives are best motivated to consummate the transaction the Board determines to be in the best interest of the Company and its stockholders by ensuring their interests are closely aligned with those of the Company's stockholders in the specific context of the transaction. The Company believes that accelerating the vesting and exercisability of stock options in an acquisition context is an appropriate means to achieve such alignment. If a transaction would otherwise likely have an adverse impact on an executive, the Company believes it is unrealistic to expect the executive to work against his or her personal, including financial, interest and inappropriate to require or request an executive to do so.

In addition, providing severance and change in control benefits is an increasingly common component of competitive offers to high-quality, high-demand candidates the Company is increasingly seeking. F.W. Cook's analysis indicated every company within the Company's peer group provides its chief executive officer some form of severance for non-change in control, as well as change in control-related, terminations without cause. Importantly, individuals with a proven record of success often times are less likely to leave existing employers and known environments without some level of commitment by a company to the individual and the offered position.

The Company does not have a plan or program regarding severance and change in control benefits that covers all of its executives. Two executives (Dr. Merritt and Mr. Hanson) negotiated individual severance and change in control benefits in connection with their employment. Information regarding these severance and change in control benefits is located under the caption Potential Payments Upon Termination or Change of Control, below. In addition, in March 2007, the Board authorized the chair of the compensation committee to, with the advice and assistance of F.W. Cook, negotiate additional terms of Mr. Levine's continued employment, which may include severance in the event of the termination of Mr. Levine's employment with the Company.

The Company believes the mix of immediate and contingent benefits provided to Dr. Merritt and Mr. Hanson strikes an appropriate balance in achieving the objectives in providing change in control benefits. Accelerating the vesting and exercisability of a substantial portion of the shares underlying stock options held by executives provides a direct financial incentive to consummate the transaction the Board wishes to pursue; ensuring a meaningful portion of the shares underlying such stock options remains unvested upon the closing of such transaction provides a direct financial incentive to executives to provide transition assistance to the acquiring entity. The Company believes that, after a reasonable transition period, it is incumbent on the acquirer to adequately incentivize the Company's employees.

Stock Option Grant Practices

The Company does not intentionally time the grant of stock options to benefit the recipient of the option, whether by granting options when the Company's stock price appears low or granting options when the Company knows of material non-public information that is likely, when announced, to result in an increase in the Company's stock price, a practice commonly referred to as spring-loading.

The Company's practice has been for the compensation committee or the full Board to approve the grant of stock options, typically at telephonic meetings or by written consent. During 2006, the compensation committee met once telephonically and acted by written consent six times to approve the grant of stock options. In addition, during 2006, the Board met once in-person, once telephonically and acted by written consent once to approve the grant of stock options. The Board also met once telephonically to approve the issuance of stock in connection with a severance agreement and release of all claims entered into with the Company's former chief financial officer.

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The one telephonic compensation committee meeting was held in January in response to the Company's chief executive officer's compensation recommendations to the compensation committee with respect to all of the Company's employees, including its executives, other than himself (as described under the caption "Compensation Program and Process," above). At this meeting, the compensation committee, among other things, approved the grant of stock options to various employees of the Company, including its executives other than its chief executive officer. The exercise price of the stock options approved at this meeting was the closing price of the Company's common stock, as reported on the American Stock Exchange, on the date of the meeting.

The six written consents were to approve the grant of stock options to new employees. Historically, shortly following a new employee's first day of employment, the Company typically drafts and distributes to the compensation committee written consents reflecting management's proposal regarding the terms of a stock option for such employee, including the number of shares underlying the option. The compensation committee is asked to return executed consents as soon as possible. The date the last executed consent is received by the Company is the effective date of the consent, and the exercise price of any stock options approved pursuant to such consent is the closing price of the Company's common stock, as reported on the American Stock Exchange, on the effective date of the consent.

The one telephonic Board meeting at which stock options were approved occurred in June 2006 in connection with the automatic grant of options to non-employee directors under the Company's 2005 Equity Incentive Plan. The one in-person Board meeting at which stock options were approved was held in late September 2006 and scheduled in mid August 2006. At this meeting, the Board approved the grant of stock options to a recently elected director of the Company and the Company's recently appointed president and chief medical officer. The exercise prices of the stock options approved at this meeting were the closing price of the Company's common stock, as reported on the American Stock Exchange, on the date of the meeting.

The one written consent of the Board by which stock options were approved was to approve the grant of a stock option to Mr. Hanson, the Company's then-prospective chief financial officer. The same process of drafting and distributing written consents described above with respect to the compensation committee applied with respect to this written consent of the Board except that, as a result of negotiations with Mr. Hanson, the Board approved the grant of a stock option to Mr. Hanson on December 15, 2006, but with the option to be granted on December 20, 2006, Mr. Hanson's start date; provided that (a) the Company did not rescind its offer of employment to Mr. Hanson, or terminate an accepted offer, prior to December 20, 2006 and (b) Mr. Hanson accepting the Company's offer of employment and commencing employment on December 20, 2006. The exercise price of the stock options was the closing price of the Company's common stock, as reported on the American Stock Exchange, on December 20, 2006, Mr. Hanson's start date.

Following approval of options, the Company's administrative personnel informs the recipient of the option grant and drafts and executes documentation evidencing the option.

The Company will continue to examine its stock option grant practices (including with respect to the timing of notifying recipients of options of the fact and terms of options that have been approved and the execution of documentation evidencing the options). The Company will employ those practices it determines best prevent intentional wrongdoing, back-dating or fraud in connection with the grant of stock options, or the perception thereof.

No Pension Benefits or Nonqualified Deferred Compensation

The Company does not offer any plans that provide for specified retirement payments and benefits or deferred compensation other than a tax-qualified 401(k) plan generally available to eligible employees.

Table of Contents**Tax and Accounting Considerations**

The Company attempts to provide compensation that is structured, to the extent possible, to maximize favorable accounting, tax and similar benefits for the Company.

Deductibility of Executive Compensation

Section 162(m) of the Internal Revenue Code of 1986, as amended, generally limits the deductibility of certain compensation in excess of \$1,000,000 paid in any one year to the chief executive officer and the other four highest paid executives. Qualifying performance-based compensation will not be subject to this deduction limit if certain requirements are met.

In designing the Company's compensation programs and arrangements, the compensation committee periodically reviews and considers the deductibility of executive compensation under Section 162(m). The Company's 2005 Equity Incentive Plan is designed to provide the compensation committee the ability to qualify awards under the plan as performance-based compensation under Section 162(m) of the code.

While the Company will continue to monitor its compensation programs in light of Section 162(m), the compensation committee considers it important to retain the flexibility to design compensation programs that are in the best long term interests of the Company and its stockholders. As a result, the compensation committee may conclude that paying compensation at levels that are not deductible under Section 162(m) is nevertheless in the best interests of the Company and its stockholders.

Summary Compensation Table

The following table sets forth information concerning compensation earned for services rendered to the Company during the year ended December 31, 2006 by its principal executive officer, all individuals serving as its principal financial officer, and the Company's three most highly compensated executive officers, other than the principal executive officer and the principal financial officer, who were serving as executive officers of the Company as of December 31, 2006. In 2006, three individuals served as the Company's principal financial officer. Collectively, these are the Named Executive Officers.

| Name and Principal Position | Year | Salary | Bonus | Stock Awards (1) | Awards (1) | Change in Pension Value and Nonqualified Deferred Compensation Plan Earnings | All Other Compensation (2) | Total |
|--|------|-----------|--------------|---------------------|---------------|---|----------------------------------|-----------|
| | | | | | | | | |
| Evan M. Levine, Chief Executive Officer | 2006 | \$250,000 | \$100,000(3) | | | | \$ 10,211(4) | \$360,211 |
| James A. Merritt, President & Chief Medical Officer (5) | 2006 | \$102,500 | \$ 37,500(6) | \$ 24,050(7) | \$ 66,477 | | \$271,159(8) | \$501,686 |
| Gregory P. Hanson, Chief Financial Officer (9) | 2006 | \$ 7,692 | | | \$ 12,458 | | | \$ 20,150 |

| | | | | | | |
|--|------|------------|----------------|------------|----------------|------------|
| Carrie E. Carlander, former Chief Financial Officer (10) | 2006 | \$ 138,462 | \$ 196,674(11) | \$ 170,397 | \$ 139,502(12) | \$ 645,035 |
| Robert A. Daniel, former acting Chief Financial Officer (13) | 2006 | \$ 130,854 | | \$ 80,953 | \$ 36 | \$ 211,843 |
| Joan M. Robbins, Chief Scientific Officer | 2006 | \$ 250,000 | | \$ 144,630 | \$ 6,365 | \$ 400,995 |
| Brian M. Culley, Chief Business Officer | 2006 | \$ 200,000 | | \$ 147,559 | \$ 8,211 | \$ 355,770 |

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- (1) The value of the stock and option awards has been computed in accordance with Statement of Financial Standards (SFAS) No. 123R, Share-Based Payment (FAS 123R), which requires that the Company recognizes as compensation expense the value (excluding the effect of assumed forfeiture rates) of all stock-based awards, including stock options, granted to employees in exchange for services over the requisite service period, which is typically the vesting period. For more information, see Note 10 in the Notes to Financial Statements contained in the Company s Annual Report on Form 10-K filed with the SEC on March 15, 2007.
- (2) Includes matching contributions made pursuant to the Company s tax-qualified 401(k) plan and

premiums paid for term life insurance policies for the benefit of the Company's executives.

- (3) This one-time cash bonus was approved by the Board and paid to Mr. Levine in March 2007 in recognition of his performance in 2006. This bonus was not pursuant to any plan or program and, immediately prior to awarding such bonus, the Company had no obligation to pay Mr. Levine this or any other bonus. This bonus was awarded and paid following the filing of the Company's Annual Report on Form 10-K and, accordingly, is not reflected in the financial statements included therein.
- (4) Represents \$10,000 in matching contributions made pursuant to the Company's tax-qualified 401(k) plan and \$211 in premiums paid for term life insurance for the benefit of Mr. Levine.

- (5) Dr. Merritt's employment with the Company commenced on September 8, 2006. From July 2005 through September 2006, Dr. Merritt consulted for the Company, acting as chief medical advisor on various clinical matters.
- (6) This one-time cash bonus was approved by the compensation committee in January 2007 and paid to Dr. Merritt in February 2007 in recognition of his performance since September 2006. This bonus was not pursuant to any plan or program and, immediately prior to awarding such bonus, the Company had no obligation to pay Dr. Merritt this or any other bonus.
- (7) The stock award was granted in consideration of services rendered as a consultant prior to commencement of Dr. Merritt's employment with the Company. As of December 31, 2006, the risk of

forfeiture with respect to this award had lapsed entirely.

- (8) Includes (a) \$263,560 earned by Dr. Merritt in 2006 for services as a consultant to the Company prior to commencement of employment with the Company and (b) reimbursement of \$3,528 in legal expenses incurred by Dr. Merritt in connection with negotiating the terms of his employment with the Company.
- (9) Mr. Hanson's employment with the Company commenced on December 20, 2006. His current base salary is \$250,000
- (10) Ms. Carlander's employment with the Company terminated on September 7, 2006.

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(11) The stock award was granted in connection with Ms. Carlander's resignation; all of the underlying shares were fully vested upon grant.

(12) Includes (a) \$109,434 for the payment of taxes on Ms. Carlander's behalf, (b) \$6,892 of accrued vacation benefits and (c) \$18,710 earned by Ms. Carlander in 2006 as a consultant to the Company following the termination of her employment on September 7, 2006.

(13) Mr. Daniel served as the Company's acting chief financial officer from September 8, 2006 through December 20, 2006. On December 20, 2006, he resumed his prior role as the Company's controller.

Grants of Plan-Based Awards

The following table sets forth information regarding grants of stock and option awards made to the Named Executive Officers during fiscal 2006:

| Name | Grant Date(1) | Approval Date(1) | Estimated Future Payouts Under Non-Equity Incentive Plan Awards | | | Estimated Future Payouts Under Equity Incentive Plan Awards | | | All Other Stock Awards: Number of Shares of Stock or | All Other Option Awards: Number of Securities Underlying | Exercise or Base Price of Option Awards (\$/Sh) | Grant Date Fair Value of Stock and Option Awards (2) |
|---------------------|------------------------|------------------|---|--------|---------|---|--------|-----------|--|--|---|--|
| | | | Threshold | Target | Maximum | Threshold | Target | Maximum | | | | |
| Evan M. Levine | | | | | | | | | | | | |
| James A. Merritt | 4/5/2006 9/27/2006 | 1/31/2006 | | | | | | 5,000(3) | 300,000(4) | \$ 2.86 | \$ 24,050 \$ 797,719 | |
| Gregory P. Hanson | 12/20/2006 | 12/15/2006 | | | | | | | 250,000(5) | \$ 2.57 | \$ 597,993 | |
| Carrie E. Carlander | 1/31/2006 9/07/2006 | | | | | | | 60,145(7) | 80,000(6) | \$ 4.75 | \$ 271,689 \$ 196,674 | |
| Robert A. Daniel | 1/31/2006 | | | | | | | | 25,000(8) | \$ 4.75 | \$ 84,903 | |
| Joan M. Robbins | 1/31/2006 | | | | | | | | 100,000(8) | \$ 4.75 | \$ 339,611 | |
| Brian M. Culley | 1/31/2006 | | | | | | | | 80,000(8) | \$ 4.75 | \$ 271,689 | |

(1) Unless otherwise indicated, the approval date of each stock and option award is the grant date of such award.

(2) The grant date fair value of each award is determined in accordance with FAS 123R. The assumptions used to calculate the value of an option award

are set forth under Note 10 of the Notes to Financial Statements contained in the Company's Annual Report on Form 10-K filed with the SEC on March 15, 2007 (excluding the effect of assumed forfeiture rates). The exercise price for all options granted to the executive officers is equal to the closing price of the Company's common stock, as reported on the American Stock Exchange, on the date of grant. Regardless of the value placed on an option award at its grant date, the actual value to the executive officer will depend on the excess of the market value of the Company's common stock at such future date when the option is exercised over the exercise price of the option.

- (3) This stock award was granted in April 2006 in consideration of Dr. Merritt's consulting services. All the shares underlying this award were initially subject to a risk of forfeiture. At the end of each calendar month after January 1, 2006, subject to Dr. Merritt's continuous service to the Company, the risk of forfeiture lapsed with respect to 1/12th of the shares and that portion vested and became free of contractual restrictions.

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- (4) This option was granted in connection with commencement of Dr. Merritt's employment in September 2006. The option vests and becomes exercisable monthly over 48 months. The exercise price of the stock option was the closing price of the Company's common stock, as reported on the American Stock Exchange, on the date of grant.
- (5) This option was granted in connection with commencement of Mr. Hanson's employment in December 2006. The option vests and becomes exercisable monthly over 48 months from Mr. Hanson's employment start date except that no shares vest or become exercisable for the first 12 months and, on the 12-month anniversary of such date, 25% of the shares vest and become

exercisable. The Board approved the grant of this stock option to Mr. Hanson on December 15, 2006, but with the option to be granted on December 20, 2006, Mr. Hanson's start date. The exercise price of this stock option was the closing price of the Company's common stock, as reported on the American Stock Exchange, on Mr. Hanson's start date.

- (6) This option was terminated in September 2006 in connection with Ms. Carlander's resignation and none of the shares underlying the option vested before the option was terminated.
- (7) This stock award was granted in connection with Ms. Carlander's resignation; all of the underlying shares were fully vested upon grant.
- (8) This option vests and becomes exercisable

monthly over 48 months from the vesting start date except that no shares vest or become exercisable for the first 12 months and, on the 12-month anniversary of the vesting start date, 25% of the shares vest and become exercisable. The exercise price of the stock option was the closing price of the Company's common stock, as reported on the American Stock Exchange, on the date of grant.

Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table

Employment Agreements

Each of Mr. Levine's, Dr. Robbins' and Mr. Culley's employment with the Company is at-will and the Company currently has no obligation to pay such officer any severance or other benefits, other than as may be required by law, in connection with a termination of employment. The Company has entered into employment agreements with Dr. Merritt and Mr. Hanson pursuant to which certain payments may be due upon termination or change in control. Information regarding these agreements is located under the caption Potential Payments Upon Termination or Change in Control, below.

Other Compensation Arrangements

Under the terms of an offer letter, dated March 5, 2003, the Company agreed to pay Dr. Robbins a bonus, payable in stock options, equal to 5% of all government grants received by the Company. In addition, the Company agreed to pay Dr. Robbins a bonus, payable in stock options, equal to 5% of capital received by the Company that is a direct result of Dr. Robbins' introduction. To date, the Company has not issued any stock options to Dr. Robbins as a result of these provisions.

Separation Arrangements with Former Chief Financial Officer

In September 2006, Ms. Carlander resigned from her positions as the Company's chief financial officer, vice president, finance, treasurer and secretary. In connection with Ms. Carlander's resignation, she and the Company entered into a severance agreement and release of all claims and a consulting agreement. Under the severance agreement, in exchange for a mutual release and the termination of outstanding stock options held by Ms. Carlander, the Company issued to Ms. Carlander a stock award of 60,145 fully-vested shares of the Company's common stock with a fair value of \$196,674 and paid employment taxes totaling \$109,434. Under the consulting

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agreement, in consideration of \$16,666.67 per calendar month plus the actual amount paid by Ms. Carlander for COBRA continuation coverage, Ms. Carlander agreed to consult for the Company on an as-needed basis. In October 2006, the Company exercised its right to terminate the consulting agreement. During 2006, the Company paid Ms. Carlander \$18,710 for her consulting services.

Under the severance agreement, Ms. Carlander and the Company agreed not to disparage one another in any manner likely to be harmful to them or their respective businesses or reputations (whether personal or professional). In addition, Ms. Carlander agreed to return to the Company all Company documents, information and property that Ms. Carlander had in her possession or control and acknowledged her continuing obligations to the Company, including those regarding non-solicitation of the Company's employees, client and customers.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information regarding outstanding equity awards held by the Named Executive Officers at the end of fiscal 2006:

| Name | Option Awards | | | | | Stock Awards | | | |
|---------------------|---|---|---|----------------------------|------------------------|---|--|---|--|
| | Number of Securities Underlying Unexercised Options (#) Exercisable | Number of Securities Underlying Unexercised Options (1) | Equity Incentive Plan Awards: Number of Securities Underlying | Option Exercise Price (\$) | Option Expiration Date | Number of Shares or Units of Stock That Have Not Vested (#) | Market Value of Shares or Units of Stock That Have Not Vested (\$) | Unearned Shares, Units or Other Rights That Have Not Vested (#) | Unearned Shares, Units or Other Rights That Have Not Vested (\$) |
| Evan M. Levine | 250,000 | | | \$ 0.50 | 12/30/2008 | | | | |
| James A. Merritt(2) | 18,750 | 281,250 | | \$ 2.86 | 9/27/2016 | | | | |
| Gregory P. Hanson | | 250,000 | | \$ 2.57 | 12/20/2016 | | | | |
| Carrie E. Carlander | 39,583 | 60,417 | | \$ 2.30 | 7/14/2015 | | | | |

Robert A.
Daniel

| | | |
|--------|---------|-----------|
| 25,000 | \$ 4.75 | 1/31/2016 |
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| Name | Option Awards | | | | Stock Awards | | | | |
|-----------------|---|---|---|----------------------------|------------------------|---|--|---|---|
| | Number of Securities Underlying Unexercised Options (#) Exercisable | Number of Securities Underlying Unexercised Options (#) (1) | Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#) | Option Exercise Price (\$) | Option Expiration Date | Number of Shares or Units of Stock That Have Not Vested (#) | Market Value of Shares or Units of Stock That Have Not Vested (\$) | Equity Incentive Plan Awards: Number of Unearned Shares, Units or Rights That Have Not Vested (#) | Equity Incentive Plan Awards: Market Payout Value of Unearned Shares, Units or Rights That Have Not Vested (\$) |
| Joan M. Robbins | 47,916 | 52,084 | | \$ 2.30 | 7/14/2015 | | | | |
| | | 100,000 | | \$ 4.75 | 1/31/2016 | | | | |
| | 300,000 | | | \$ 0.50 | 12/30/2008 | | | | |
| Brian M. Culley | 66,666 | 33,334 | | \$ 2.30 | 7/14/2015 | | | | |
| | | 80,000 | | \$ 4.75 | 1/31/2016 | | | | |

(1) Unless otherwise noted, all such options vest and become exercisable monthly over 48 months from the vesting start date except that no shares vest or become exercisable for

the first
12 months and,
on the 12-month
anniversary of
the vesting start
date, 25% of the
shares vest and
become
exercisable.

- (2) Dr. Merritt's
option vests and
becomes
exercisable
monthly over
48 months from
the vesting start
date.

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Table of Contents**Option Exercises and Stock Vested**

The following table sets forth information regarding options exercised and shares of common stock acquired upon vesting by the Named Executive Officers during fiscal 2006:

| Name | Option Awards | | Stock Awards | |
|---------------------|--------------------------|------------------|-------------------------|-----------------|
| | Number of Shares | Value Realized | Number of Shares | Value Realized |
| | Acquired on Exercise (#) | on Exercise (\$) | Acquired on Vesting (#) | on Vesting (\$) |
| Evan M. Levine | | | | |
| James A. Merritt | | | 5,000 | \$ 18,417 |
| Gregory P. Hanson | | | | |
| Carrie E. Carlander | | | 60,145 | \$ 196,674 |
| Robert A. Daniel | | | | |
| Joan M. Robbins | | | | |
| Brian M. Culley | | | | |

Potential Payments Upon Termination or Change In Control*Acceleration of Vesting of Outstanding Stock Options*

Stock options granted under the Company's 2005 Equity Incentive Plan typically are evidenced by the Company's standard stock option agreement. The Company may elect to incorporate into its standard stock option agreement one or more alternatives regarding the effect of a change in control on the underlying option, including its vesting and exercisability.

The Company generally provides in stock option agreements (actually entered into with recipients of stock option awards) that the underlying option will accelerate in full in the event of an acquisition constituting a change of control (as such terms are defined in the Company's standard form of stock option agreement) if the recipient remains employed by the Company as of the closing date of such acquisition and the option is not assumed or replaced by the successor or acquiring entity or the entity in control of such successor or acquiring entity; otherwise the option will not accelerate in the event of such an acquisition.

In addition, the Company has incorporated into certain recent stock option awards a provision providing that, if following a change of control in which an option is assumed as described above, in the event of the recipient's involuntary termination (as such term is defined in the Company's standard form of stock option agreement) within a period of time, not to exceed 24 months, after the closing date of such change of control, the vesting of the assumed option will be accelerated such that the option will vest as of the effective date of such involuntary termination with respect to all shares that would have vested during such period. The Company anticipates including this provision in most stock option awards made in the future.

Cash Payments

Except as described below or as may be required by law, none of the Named Executive Officers are entitled to cash payments in connection with their termination, whether in connection with a change in control of the Company or otherwise.

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As of December 31, 2006, the Company had the following accrued vacation benefits liability for the Named Executive Officers who were employed by the Company at December 31, 2006: Mr. Levine: \$60,487; Dr. Merritt: \$11,918; Mr. Hanson: \$632; Mr. Daniel: \$9,721; Dr. Robbins: \$51,338; and Mr. Culley: \$32,976.

Employment and Separation Agreements

It is the Company's policy that, at the beginning of their employment, all employees sign the Company's standard confidential information, non-solicitation and invention assignment agreement for employees. Under the current version of this agreement, employees agree that, during the period of the employee's service to the Company and for one year thereafter, the employee will not (a) solicit any employee or consultant of the Company to leave the employ of or terminate any relationship with the Company or (b) solicit the business of any client or customer of the Company using its confidential information.

President and Chief Medical Officer

Dr. Merritt's employment with the Company is at-will but, in the event of Dr. Merritt's involuntary termination, subject to Dr. Merritt's execution of a mutual release, Dr. Merritt will receive an amount equal to his base salary for the 6-month period immediately prior to the effective date of such involuntary termination, payable in 6 substantially equal installments over the 6-month period following such effective date, and the Company will pay all costs the Company would otherwise have incurred to maintain Dr. Merritt's health, welfare and retirement benefits if Dr. Merritt had continued to render services to the Company for 6 months after such effective date. Dr. Merritt's current base salary is \$362,500 per year and the current incremental cost to the Company of Dr. Merritt's health, welfare and retirement benefits are \$892 per month.

In connection with his employment, the Company granted to Dr. Merritt a stock option to purchase up to 300,000 shares of the Company's common stock, which option vests and becomes exercisable monthly over 48 months. As of December 31, 2006, 18,750 shares underlying this option had vested and become exercisable. Despite the foregoing vesting schedule, in the event of Dr. Merritt's involuntary termination, and subject to Dr. Merritt's execution of a mutual release, that number of shares underlying this stock option will vest and become exercisable, effective immediately prior to the effective date of such involuntary termination, that would have vested and become exercisable had Dr. Merritt remained in continuous service (i.e., the absence of any interruption or termination of services as an employee, director or consultant of the Company, or any subsidiary) for 6 months following such effective date, and Dr. Merritt will have 180 days following the effective date of such involuntary termination to exercise this stock option. In addition, despite the foregoing vesting schedule, in the event of an acquisition, 50% of any unvested shares underlying this stock option will vest and become exercisable as of the closing date of such acquisition and the remaining unvested shares underlying this stock option will vest ratably by month over the 12-month period beginning on the closing of such acquisition, subject to Dr. Merritt's continuous service. In addition, in the event of Dr. Merritt's involuntary termination within 24 months of an acquisition constituting a change in control, that number of unvested shares underlying this stock option will vest and become exercisable, as of the effective date of such involuntary termination, that would have vested and become exercisable had Dr. Merritt remained in continuous service for 24 months following such effective date.

With respect to Dr. Merritt, an involuntary termination is one that occurs by reason of dismissal for any reason other than misconduct or of voluntary resignation following: (i) a change in position that materially reduces the level of Dr. Merritt's responsibility, (ii) a material reduction in Dr. Merritt's base salary, or (iii) relocation by more than 50 miles; provided that (ii) and (iii) will apply only if Dr. Merritt has not consented to the change or relocation.

Misconduct means the commission of any act of fraud, embezzlement or dishonesty by Dr. Merritt, any unauthorized use or disclosure by Dr. Merritt of confidential information or trade secrets of the Company (or any parent or subsidiary), or any other intentional misconduct by Dr. Merritt adversely affecting the business affairs of the Company (or any parent or subsidiary) in a material manner. The foregoing definition will not, however, be deemed to be inclusive of all the acts or omissions which the Company (or any parent or subsidiary) may consider as grounds for the dismissal or discharge of Dr. Merritt.

Table of Contents*Chief Financial Officer*

Mr. Hanson's employment with the Company is at-will, but in the event of Mr. Hanson's involuntary termination, and subject to his execution of a general release of claims (which includes a nondisparagement provision and a covenant not to sue the Company), Mr. Hanson will receive an amount equal to his base salary for the six-month period immediately prior to the effective date of such involuntary termination, payable in six substantially equal installments over the six-month period following such effective date, and the Company will pay in cash all costs the Company would otherwise have incurred to maintain Mr. Hanson's health, welfare and retirement benefits if Mr. Hanson had continued to render services to the Company for 6 months after such effective date. Mr. Hanson's current base salary is \$250,000 per year and the current incremental cost to the Company of Mr. Hanson's health, welfare and retirement benefits are \$2,255 per month.

In connection with his employment, the Company granted to Mr. Hanson a stock option to purchase up to 250,000 shares of the Company's common stock, which option vests and becomes exercisable monthly over 48 months from the vesting start date except that no shares vest or become exercisable for the first 12 months and, on the 12-month anniversary of the vesting start date, which is December 20, 2007, 25% of the shares vest and become exercisable. Despite the foregoing vesting schedule, in the event of Mr. Hanson's involuntary termination, and subject to Mr. Hanson's execution of a release of claims, that number of shares underlying this stock option will vest and become exercisable, effective immediately prior to the effective date of such involuntary termination, that would have vested and become exercisable had Mr. Hanson remained in continuous service (i.e., the absence of any interruption or termination of services as an employee, director or consultant of the Company, or any subsidiary) for 6 months following such effective date, and Mr. Hanson will have 180 days following the effective date of such involuntary termination to exercise this stock option. In addition, despite the foregoing vesting schedule, in the event of an acquisition, 50% of any unvested shares underlying this stock option will vest and become exercisable as of the closing date of such acquisition and the remaining unvested shares underlying this stock option will vest ratably by month over the 12-month period beginning on the closing of such acquisition, subject to Mr. Hanson's continuous service. In addition, in the event of Mr. Hanson's involuntary termination within 12 months of an acquisition constituting a change in control, that number of unvested shares underlying this stock option will vest and become exercisable, as of the effective date of such involuntary termination, that would have vested and become exercisable had Mr. Hanson remained in continuous service for 12 months following such effective date.

With respect to Mr. Hanson, an involuntary termination is one that occurs by reason of dismissal for any reason other than misconduct or of voluntary resignation following: (i) a change in position that materially reduces the level of Mr. Hanson's responsibility, (ii) a material reduction in Mr. Hanson's base salary, or (iii) relocation by more than 50 miles; provided that (ii) and (iii) will apply only if Mr. Hanson has not consented to the change or relocation.

Misconduct means the commission of any act of fraud, embezzlement or dishonesty by Mr. Hanson, any unauthorized use or disclosure by Mr. Hanson of confidential information or trade secrets of the Company (or any parent or subsidiary), or any other intentional misconduct by Mr. Hanson adversely affecting the business affairs of the Company (or any parent or subsidiary) in a material manner. The foregoing definition will not, however, be deemed to be inclusive of all the acts or omissions which the Company (or any parent or subsidiary) may consider as grounds for the dismissal or discharge of Mr. Hanson.

Table of Contents*Quantification of Severance and Change in Control Benefits*

The following table describes the potential severance payments and benefits to which Dr. Merritt and Mr. Hanson would be entitled in connection with specified events, as if the specified event occurred as of December 29, 2006, the last day of the Company's last fiscal year.

| Name | Benefit | Involuntary Termination Prior to a | | Involuntary Termination Immediately | | |
|----------------------|--------------------------|---------------------------------------|--|--|-------------------|---|
| | | Change in Control | Change in Control | Change in Control | Change in Control | |
| | | Payment | Increase in Expense Recognized by the Company in 2006 (1) | Increase in Expense Recognized by the Company in 2006 (1) | Payment | Increase in Expense Recognized by the Company in 2006 (1)(2) |
| James A. Merritt | Base Salary | \$ 162,500 | | | \$ 162,500 | |
| | Vesting Acceleration | | \$ 83,095 | \$ 457,026 | | \$ 731,242 |
| | COBRA Premiums (3) | 5,349 | | | 5,349 | |
| Total | | \$ 167,849 | \$ 83,095 | \$ 457,026 | \$ 167,849 | \$ 731,242 |
| Gregory P. Hanson | Base Salary | \$ 125,000 | | | \$ 125,000 | \$ 585,535 |
| | Vesting Acceleration | | \$ (12,458) | \$ 286,539 | | |
| | COBRA Premiums (3) | 13,531 | | | 13,531 | |
| Total | | \$ 138,531 | \$ (12,458) | \$ 286,539 | \$ 138,531 | \$ 585,535 |

(1) Amounts shown in this column reflect the increase in expense as determined pursuant to FAS 123R for option awards that would be

accelerated in connection with the specified event. The assumptions used to calculate the value of an option award are set forth under Note 10 of the Notes to Financial Statements contained in the Company's Annual Report on Form 10-K filed with the SEC on March 15, 2007 (excluding the effect of assumed forfeiture rates). There can be no assurance that options will ever be exercised (in which case no value will be actually realized by the executive) or that the value on exercise will be equal to the FAS 123R value shown in this column.

- (2) Assumes the executive remains employed by the Company on the closing date of a change in control and immediately thereafter is

subject to an
involuntary
termination.

- (3) Includes a 2%
administration
fee charged to
the Company by
the Company's
third party
service
provider.

Former Acting Chief Financial Officer

In September 2006 and in connection with the resignation of Ms. Carlander as the Company's chief financial officer, Robert A. Daniel was appointed as the Company's acting chief financial officer. In December 2006 and in connection with Mr. Hanson's appointment as the Company's chief financial officer, Mr. Daniel resumed his prior role as the Company's controller.

In February 2007, Mr. Daniel resigned from his position as the Company's controller. In connection with Mr. Daniel's resignation, he and the Company entered into a separation agreement and release of claims and a consulting agreement. Under the separation agreement, in exchange for a mutual release of claims, the Company agreed to the following: (a) to pay Mr. Daniel an amount equal to six months of his then-current base salary, less all the required withholdings and taxes, payable in a lump sum on March 30, 2007, provided that both (i) Mr. Daniel had not terminated the consulting agreement prior to March 30, 2007 and (ii) the Company had not terminated the consulting agreement prior to March 30, 2007 as a result of Mr. Daniel's material breach of the consulting agreement and (b) if Mr. Daniel elects continuation of coverage under the federal law known as COBRA, to continue to pay Mr. Daniel's medical, dental and vision premiums through September 30, 2007, unless he becomes eligible for coverage under another group insurance plan before that date. In accordance with the separation agreement, in March 2007, the Company paid Mr. Daniel \$72,500 and anticipates paying Mr. Daniel an

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additional \$9,602 in connection with paying Mr. Daniel's medical and dental premiums from April 1, 2007 through September 30, 2007, assuming Mr. Daniel does not become eligible for coverage under another group insurance plan before September 30, 2007.

Under the separation agreement, Mr. Daniel and the Company agreed not to make any voluntary statements that defame, disparage or in any way criticize the other. In addition, Mr. Daniel agreed to return to the Company all Company documents, information and property that Mr. Daniel had in his possession or control and acknowledged his continuing obligations to the Company, including those regarding non-solicitation of the Company's employees, consultants, client and customers.

Director Compensation

Directors who are employees of the Company do not receive any additional compensation for their services as directors. The Company's non-employee directors are compensated as described below.

Retainer and Meeting Fees

During 2006, the Company paid its non-employee directors an annual retainer, which was paid quarterly, and Board and committee meeting fees. On June 21, 2006, the Board approved changes to the cash compensation to be paid to its non-employee directors effective as of May 15, 2006. Prior to May 15, 2006, the Company paid each of its non-employee directors, other than Dr. Johnson, the Company's chairman, an annual retainer of \$20,000. In consideration of his services as chairman, the Company paid Dr. Johnson an annual retainer of \$25,000. Effective May 15, 2006, the cash compensation the Company pays its non-employee directors is as set forth in the table below:

| Annual Retainers | Chairperson | Member |
|-------------------------------------|-------------|----------|
| Board of Directors | \$25,000 | \$10,000 |
| Audit Committee | \$20,000 | \$10,000 |
| Compensation Committee | \$10,000 | \$ 5,000 |
| Nominating and Governance Committee | \$10,000 | \$ 5,000 |

In addition to the annual retainers, as of May 15, 2006, the Company pays the following per meeting fees with respect to each meeting of the Board or any committee of the Board with a duration of more than 15 minutes, other than (i) the first four meetings of the Board held during each calendar year, (ii) the first four meetings of the audit committee held during each calendar year, (iii) the first two meetings of the compensation committee held during each calendar year and (iv) the first meeting of the nominating and governance committee held during each calendar year:

\$1,000 to each director for each such meeting attended in person; and

\$500 to each director for each such meeting attended via telephone conference call.

In addition to the retainer and meeting fees, the Company reimburses its non-employee directors for travel and other reasonable out-of-pocket expenses related to attendance at Board and committee meetings.

Equity Compensation

Pursuant to the terms of the Company's 2005 Equity Incentive Plan, each non-employee director is automatically granted a nonstatutory option to purchase 50,000 shares of the Company's common stock at the first meeting of the Board following each annual meeting of stockholders, provided that such non-employee director shall have served on the Board for at least the preceding six months. The exercise price per share of each automatically granted option is equal to 105% of the fair market value of the shares on the grant date. Each such option becomes exercisable as to 1/12th of the shares underlying the option at the end of each calendar month after its date of grant, provided that the director remains in continuous service. The options expire no later than ten years after the date of grant.

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In addition, at the discretion of the Board, the Company may award stock options to new directors in connection with their appointment to the Board. In September 2006, at the recommendation of the Company's chief executive officer, the Company granted to Mr. Lief a stock option to purchase up to 50,000 shares of the Company's common stock. The exercise price of the stock option was the closing price of the Company's common stock, as reported on the American Stock Exchange, on the date the stock option was approved.

The following table shows compensation information for the Company's current and former non-employee directors for the year ended December 31, 2006:

| Name | Fees Earned or | | Option Awards (1) | Non-Equity Incentive Plan Compensation | Change in Pension Value and Nonqualified Deferred Compensation Earnings | All Other Compensation | Total |
|----------------------------|-------------------|-----------------|----------------------|---|---|------------------------------|------------|
| | Paid in Cash | Stock Awards | | | | | |
| Mark N.K. Bagnall | \$ 32,500 | | \$ 134,548(2) | | | | \$ 167,048 |
| Alexander J. Denner (3) | | | | | | | |
| Michael M. Goldberg | \$ 29,875 | | \$ 129,254(4) | | | | \$ 159,129 |
| M. Ross Johnson | \$ 25,900 | | \$ 208,345(5) | | | | \$ 234,245 |
| Jack Lief(6) | \$ 8,333 | | \$ 43,350(7) | | | | \$ 51,683 |
| Keith Meister(8) | | | \$ 88,593(9) | | | | \$ 88,593 |
| Mark J. Pykett | \$ 30,875 | | \$ 129,254(10) | | | | \$ 160,129 |

(1) The assumptions used to calculate the value of an option award are set forth under Note 10 of the Notes to Financial Statements contained in the Company's Annual Report on Form 10-K filed with the

SEC on
March 15, 2007
(excluding the
effect of
assumed
forfeiture rates).

(2) Reflects the
share-based
compensation
costs recognized
in 2006 for
financial
statement
reporting
purposes for
options granted
on June 2, 2006,
December 23,
2005 and
July 14, 2005.
Mr. Bagnall had
no other
outstanding
stock options at
the end of fiscal
2006. The grant
date fair value
of the stock
option granted
in 2006,
computed in
accordance with
FAS 123R, was
\$151,873.

(3) Dr. Denner
commenced
service as a
director on
October 26,
2006.
Dr. Denner has
declined fees
associated with
his participation
on the Board
and its
committees.

(4)

Reflects the
share-based
compensation
costs recognized
in 2006 for
financial
statement
reporting
purposes for
options granted
on June 2, 2006,
December 23,
2005 and
July 14, 2005.
Dr. Goldberg
had no other

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outstanding stock options at the end of fiscal 2006. The grant date fair value of the stock option granted in 2006, computed in accordance with FAS 123R, was \$151,873.

- (5) Reflects the share-based compensation costs recognized in 2006 for financial statement reporting purposes for options granted on June 2, 2006, December 23, 2005 and July 14, 2005. Dr. Johnson had no other outstanding stock options at the end of fiscal 2006. The grant date fair value of the stock option granted in 2006, computed in accordance with FAS 123R, was \$151,873.

- (6) Mr. Lief commenced service as a director on September 22, 2006.

- (7) Reflects the share-based compensation costs recognized for financial statement reporting purposes for an option granted on September 27, 2006. Mr. Lief had no other outstanding stock options at the end of fiscal 2006. The grant date fair value of this stock option, computed in accordance with FAS 123R, was \$130,050.
- (8) Mr. Meister resigned from the Board effective October 26, 2006. Mr. Meister did not accept any fees for his participation on the Board and its committees.
- (9) Reflects the share-based compensation costs recognized in 2006 for financial statement reporting purposes for an option granted on June 2, 2006. Mr. Meister had no other

outstanding stock options at the end of fiscal 2006. The grant date fair value of the stock option granted in 2006, computed in accordance with FAS 123R, was \$151,873. The right to exercise this option expired in January 2007 without being exercised.

- (10) Reflects the share-based compensation costs recognized in 2006 for financial statement reporting purposes for options granted on June 2, 2006, December 23, 2005 and July 14, 2005. Dr. Pykett had no other outstanding stock options at the end of fiscal 2006. The grant date fair value of the stock option granted in 2006, computed in accordance with FAS 123R, was \$151,873.

REPORT OF THE COMPENSATION COMMITTEE

The purposes of the compensation committee are to assist the Board in the discharge of its responsibilities with respect to compensation for the Company's executive officers and independent directors, report annually to the Company's stockholders on executive compensation matters, administer the Company's equity-based compensation

plans, and take or cause to be taken such other actions and address such other matters as the Board may from time to time authorize the Committee to undertake or assume.

The compensation committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management. Based on these reviews and discussions, the compensation committee recommended to the Board that the Compensation Discussion and Analysis be included in the Company's Annual Report on Form 10-K or the annual meeting proxy statement on Schedule 14A.

COMPENSATION COMMITTEE

Michael M. Goldberg

Mark N.K. Bagnall

Alexander J. Denner

Jack Lief

Mark J. Pykett

Table of Contents**REPORT OF THE AUDIT COMMITTEE**

Under the guidance of a written charter adopted by the Board, the purpose of the audit committee is to oversee the accounting and financial reporting processes of the Company and audits of its financial statements and the effectiveness of the Company's internal control over financial reporting. The responsibilities of the audit committee include appointing and providing for the compensation of the independent registered public accounting firm. Each of the members of the audit committee meets the independence and qualification requirements of the American Stock Exchange.

Management has primary responsibility for the system of internal controls and the financial reporting process. The independent registered public accounting firm has the responsibility to express an opinion on the financial statements based on an audit conducted in accordance with generally accepted auditing standards. The independent registered public accounting firm also is responsible for auditing the Company's internal control over financial reporting and management's assessment thereof.

In this context and in connection with the audited financial statements contained in the Company's Annual Report on Form 10-K, the audit committee:

reviewed and discussed the audited financial statements as of and for the fiscal year ended December 31, 2006 with the Company's management;

discussed with J.H. Cohn, LLP, the Company's independent registered public accounting firm, the matters required to be discussed by Statement of Auditing Standards No. 61, as amended, as adopted by the Public Company Accounting Oversight Board in Rule 3200T;

reviewed the written disclosures and the letter from J.H. Cohn, LLP required by the Independence Standards Board Standard No. 1, as adopted by the Public Company Accounting Oversight Board in Rule 3600T, and has discussed with J.H. Cohn, LLP their independence; and

based on the foregoing reviews and discussions, recommended to the Board that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2006 filed with the Securities and Exchange Commission.

AUDIT COMMITTEE

Mark N.K. Bagnall

Michael M. Goldberg

Jack Lief

Mark J. Pykett

Principal Accountant Fees and Services

The audit committee has appointed J.H. Cohn LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2007. The Company is asking the stockholders to ratify this appointment.

The following table shows the fees paid or accrued by the Company for the audit and other services provided by J.H. Cohn LLP for fiscal 2005 and 2006.

| | 2005 | 2006 |
|-----------------------------------|-------------------|-------------------|
| Audit Fees ⁽¹⁾ | \$ 317,903 | \$ 328,393 |
| Audit-Related Fees ⁽²⁾ | | 36,300 |
| Tax Fees | | |
| All Other Fees | | |
| Total | \$ 317,903 | \$ 364,693 |

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The audit committee has delegated to the chair of the audit committee the authority to pre-approve audit-related and non-audit services not prohibited by law to be performed by the Company's independent registered public accounting firm and associated fees, provided that the chair is required to report any decision to pre-approve such audit-related or non-audit services and fees to the full audit committee at its next regular meeting.

- (1) Audit Fees represent fees for professional services provided in connection with the audit of the Company's financial statements (including the audit of internal controls over financial reporting under Section 404 of the Sarbanes Oxley Act) and review of the Company's quarterly financial statements and services normally provided in connection with statutory and regulatory filings and engagements.
- (2) Audit-Related Fees consist primarily of assurance and related services related to the performance of the annual audit or review of the Company's financial statements.

PROPOSAL 1 ELECTION OF DIRECTORS

At the Annual Meeting, the stockholders will vote on the election of six directors to serve for one-year terms until the next annual meeting of stockholders in and until their successors are elected and qualified, or until their earlier death, retirement, resignation or removal. The Board has unanimously nominated Evan M. Levine, Mark N.K. Bagnall, Alexander J. Denner, Michael M. Goldberg, Jack Lief and Mark J. Pykett for election to the Board as directors. The nominees have indicated that they are willing and able to serve as directors. If any of the nominees becomes unable or unwilling to serve, the accompanying proxy may be voted for the election of such other person as shall be designated by the Board. The proxies being solicited will be voted for no more than six nominees at the Annual Meeting. The directors will be elected by the vote of the holders of a majority of votes cast, in person or by proxy, at the Annual Meeting, assuming a quorum is present. Stockholders do not have cumulative voting rights in the election of directors.

The Board recommends a vote for the election of Evan M. Levine, Mark N.K. Bagnall, Alexander J. Denner, Michael M. Goldberg, Jack Lief and Mark J. Pykett as directors.

Unless otherwise instructed, it is the intention of the persons named in the accompanying proxy card to vote shares represented by properly executed proxy cards for the election of Evan M. Levine, Mark N.K. Bagnall, Alexander J. Denner, Michael M. Goldberg, Jack Lief and Mark J. Pykett.

PROPOSAL 2 RATIFICATION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

At the Annual Meeting, the stockholders will be asked to ratify the appointment of J.H. Cohn LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2007. Representatives of J.H. Cohn LLP are expected to be present at the Annual Meeting and will have the opportunity to make statements if they desire to do so. Such representatives are also expected to be available to respond to appropriate questions.

The Board recommends a vote for the ratification of the appointment of J.H. Cohn LLP as the Company's independent auditors for the fiscal year ending December 31, 2007.

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OTHER MATTERS

As of the time of preparation of this Proxy Statement, neither the Board nor management intends to bring before the meeting any business other than the matters referred to in the Notice of Annual Meeting and this Proxy Statement. If any other business should properly come before the meeting, or any adjournment thereof, the persons named in the proxy will vote on such matters according to their best judgment.

STOCKHOLDER PROPOSALS FOR 2008 ANNUAL MEETING

The Company's bylaws provide that advance notice of a stockholder's proposal must be delivered to the secretary of the Company at the Company's principal executive offices not later than one hundred twenty (120) days prior to the anniversary of the mailing date of the proxy materials for the previous year's annual meeting. However, the Company's bylaws also provide that in the event that no annual meeting was held in the previous year or the date of the annual meeting is changed by more than 30 days from the date contemplated at the time of the previous year's proxy statement, this advance notice must be received not later than the later of one hundred twenty (120) days prior to such annual meeting or 10 days following the day on which public announcement of the date of such meeting is first made.

Each stockholder's notice must contain the following information as to each matter the stockholder proposes to bring before the annual meeting: (a) as to each person, if any, whom the stockholder proposes to nominate for election or re-election as a director: (i) the name, age, business address and residence address of such person, (ii) the principal occupation or employment of such person, (iii) the class and number of shares of the Company that are beneficially owned by such person, (iv) a description of all arrangements or understandings between the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nominations are to be made by the stockholder, (v) any other information relating to such person that is required to be disclosed in solicitations of proxies for elections of directors, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act (including, without limitation, such person's written consent to being named in the proxy statement, if any, as a nominee and to serving as a director if elected) and (vi) as to such stockholder giving notice, the information required to be provided pursuant to paragraph (b) below; and (b) as to any other business that the stockholder proposes to bring before the meeting: (i) a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (ii) the name and address, as they appear on the Company's books, of the stockholder proposing such business, (iii) the class and number of shares of the Company which are beneficially owned by the stockholder, (iv) any material interest of the stockholder in such business and (v) any other information that is required to be provided by the stockholder pursuant to Regulation 14A under the Exchange Act, in such stockholder's capacity as a proponent to a stockholder proposal.

A copy of the full text of the provisions of the Company's bylaws dealing with stockholder nominations and proposals is available to stockholders from the secretary of the Company upon written request.

Under the rules of the SEC and assuming the date of the annual meeting is not changed by more than 30 days from the date contemplated at the time of the previous year's proxy statement, stockholders who wish to submit proposals for inclusion in the Proxy Statement of the Board for the 2008 Annual Meeting of Stockholders must submit such proposals so as to be received by the Company, at 6725 Mesa Ridge Road, Suite 100, San Diego, CA 92121, on or before December 24, 2007. In addition, if the Company is not notified by December 24, 2007 of a proposal to be brought before the 2008 Annual Meeting of Stockholders by a stockholder, then proxies held by management may provide the discretion to vote against such proposal even though it is not discussed in the proxy statement for such meeting.

By Order of the Board of Directors

Chief Executive Officer and
Director

San Diego, California
April 23, 2007

YOUR VOTE IS IMPORTANT!

You are cordially invited to attend the Annual Meeting. However, to ensure that your shares are represented at the meeting, please submit your proxy or voting instructions by mail, using the return envelope provided. Please see the instructions on the proxy and voting instruction card. Submitting a proxy or voting instructions will not prevent you from attending the Annual Meeting and voting in person, if you so desire, but will help the Company secure a quorum and reduce the expense of additional proxy solicitation.

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**ADVENTRX PHARMACEUTICALS, INC.
Proxy Solicited by the Board of Directors
for the Annual Meeting of Stockholders
to be Held May 23, 2007**

The undersigned hereby appoints Evan M. Levine and Gregory P. Hanson or any one of them with full power of substitution, proxies to vote at the Annual Meeting of Stockholders of ADVENTRX Pharmaceuticals, Inc. (the Company) to be held on May 23, 2007 at 10:00 a.m., local time, and at any adjournment thereof, hereby revoking any proxies heretofore given, to vote all shares of Common Stock of the Company held or owned by the undersigned as directed on the reverse side of this proxy card, and in their discretion upon such other matters as may come before the meeting.

1. To elect as directors, to hold office until the 2008 Annual Meeting of Stockholders and until their successors are elected and qualified, the nominees listed below:

- Mark N.K. Bagnall
- Alexander J. Denner
- Michael M. Goldberg
- Evan M. Levine
- Jack Lief
- Mark J. Pykett

FOR
all nominees listed
(except as indicated
below)

WITHHOLD AUTHORITY TO VOTE
(as to all nominees)

To withhold authority to vote for any individual nominee, write the nominee s name on the line provided below.

2. To ratify the appointment of J.H. Cohn LLP as the Company s independent registered public accounting firm for the fiscal year ending December 31, 2007.

_____ For _____ Against _____
Abstain

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The Board recommends that you vote FOR the above proposals. This proxy, when properly executed, will be voted in the manner directed above. **WHEN NO CHOICE IS INDICATED, THIS PROXY WILL BE VOTED FOR THE ABOVE PROPOSALS.** This proxy may be revoked by the undersigned at any time, prior to the time it is voted by any of the means described in the accompanying Proxy Statement.

Signature(s) of Stockholder(s)

Date and sign exactly as name(s) appear(s) on this proxy. If signing for estates, trusts, corporations or other entities, title or capacity should be stated. If shares are held jointly, each holder should sign.

Date: _____, _____

**PLEASE COMPLETE, DATE AND SIGN THIS PROXY
AND RETURN IT PROMPTLY IN THE ENCLOSED ENVELOPE.**