

SCHEDULE 14A

PROXY STATEMENT PURSUANT TO SECTION 14 (a) OF THE
SECURITIES EXCHANGE ACT OF 1934
(AMENDMENT NO.)

Filed by the Registrant [x]

Filed by a Party other than the Registrant []

Check the appropriate box:

[] Preliminary Proxy Statement

[x] Definitive Proxy Statement

[] Definitive Additional Materials

[] Soliciting Material Pursuant to §240.14a-12

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A. P. PHARMA, 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):

[x] 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:

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

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1) Amount Previously Paid:

2) Form, Schedule or Registration Statement No.

3) Filing Party:

4) Date Filed:

A.P. PHARMA, INC.

Notice Of Annual Meeting Of Stockholders

To Be Held May 28, 2008

The Annual Meeting of Stockholders of A.P. Pharma, Inc. (the "Company") will be held on May 28, 2008 at 9:00 a.m. local time at the Company's headquarters located at 123 Saginaw Drive, Redwood City, California 94063, for the following purposes, as more fully described in the accompanying Proxy Statement:

1. To elect six directors to hold office until the 2009 Annual Meeting of Stockholders and until their successors are elected and qualified.
2. To ratify the appointment of Odenberg, Ullakko, Muranishi & Co. LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2008.
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 10, 2008 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 at the offices of the Company located at 123 Saginaw Drive, Redwood City, California 94063 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

Julian N. Stern, Secretary

Redwood City, California
April 14, 2008

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 (1) over the Internet, (2) by telephone or (3) 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.

A.P. PHARMA, INC.
123 Saginaw Drive
Redwood City, California 94063
(650) 366-2626

PROXY STATEMENT

2008 ANNUAL MEETING OF STOCKHOLDERS

A.P. Pharma, 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 for use at the Annual Meeting of Stockholders to be held on May 28, 2008 at 9:00 a.m. local time at the Company's headquarters located at 123 Saginaw Drive, Redwood City, California 94063, and at any adjournments thereof (the "Annual Meeting"). These materials are being mailed to stockholders on or about April 21, 2008.

Only holders of the Company's common stock as of the close of business on April 10, 2008 (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 30,809,654 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 which 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 of Directors listed on the proxy card and for the ratification of the appointment of Odenberg, Ullakko, Muranishi & Co. LLP as the Company's independent independent registered public accounting firm for the fiscal year ending December 31, 2008. 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 Delaware law and the Company's Amended and Restated Certificate of Incorporation and Bylaws, if a quorum exists at the meeting, the affirmative vote of a plurality 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 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, 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 the Secretary of the Company at 123 Saginaw Drive, Redwood City, California 94063 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 of Directors of the Company. 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. The Company, if requested, will also pay brokers, banks and other fiduciaries who hold shares of Common Stock for beneficial owners for their reasonable out-of-pocket expenses of forwarding these materials to stockholders.

INFORMATION CONCERNING THE BOARD OF DIRECTORS AND EXECUTIVE OFFICERS

Currently, the number of directors authorized in accordance with our bylaws and subsequent board resolution is seven. Pursuant to the bylaws of the Company, the Board of Directors has adopted a further resolution to reduce the number of authorized directors to six effective immediately prior to the opening of the polls for the election of directors at the Annual Meeting.

Six directors are to be elected at the Annual Meeting. Each director elected at the Annual Meeting will hold office until the next annual meeting of stockholders and his or her successor has been duly elected and qualified or until the earlier of his or her resignation or removal.

The nominees for the Board of Directors of the Company and their ages and position with the Company are as follows:

Name	Age	Position with Company	Director Since
Paul Goddard, Ph.D. ⁽⁵⁾	58	Chairman	2000
Peter Riepenhausen ⁽³⁾⁽⁴⁾	71	Director	1991
Toby Rosenblatt ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾	69	Director	1983
Arthur Taylor ⁽¹⁾⁽²⁾	51	Director	2006
Gregory Turnbull ⁽²⁾⁽⁵⁾	69	President and Chief Executive Officer, Director; Interim Chief Financial Officer	1986
Robert Zerbe, M.D.	57	Director	2002

- (1) Member of the Audit Committee of the Board.
- (2) Member of the Finance Committee of the Board.
- (3) Member of the Compensation and Stock Option Committee of the Board.
- (4) Member of the Nominating and Governance Committee of the Board.
- (5) Member of the Executive Committee of the Board.

Paul Goddard, Ph.D. has served as Chairman of our board of directors since November 2000. Dr. Goddard has served as Chief Executive Officer for ARYx Therapeutics, Inc. since 2005 and Chairman of the Board since 2003. He has also been a director of Adolor, Inc. since 2000 and of Onyx Pharmaceuticals, Inc. since 1997. From 1998 to 2000, Dr. Goddard was President and Chief Executive Officer of Elan Corporation, plc's pharmaceutical division. From 1991 to 1998, Dr. Goddard served as Chairman and Chief Executive Officer of Neurex Corporation. In 1998, Neurex was acquired by Elan. Prior to Neurex, Dr. Goddard held various senior management positions at SmithKline Beecham.

Peter Riepenhausen has served as a member of our board of directors since April 1991. Mr. Riepenhausen is a business consultant. He served as Chairman, Europe for Align Technology, Inc. from 2000 until 2002 and President and Chief Executive Officer of ReSound Corporation from 1994 to 1998. He served as a director of Caradon (Europe) plc from April 1994 until September 1998. He currently serves as Chairman of the Board of Oculenta Holdings and as a director of The Resource Group.

Toby Rosenblatt has served as a member of our board of directors since September 1983. Mr. Rosenblatt has served as President of Founders Investments, Ltd., a private investment limited partnership since 1999. Mr. Rosenblatt also serves as a director of the BlackRock Equity Liquidity Mutual Funds, Forward Management, LLC and is a trustee of numerous civic and educational institutions.

Arthur Taylor has served as a member of our board of directors since August 2006. Mr. Taylor is Vice-President, General Manager of Kyphon Products and Interspinous Decompression Devices., Spinal & Biologics Business, Medtronic Inc. Prior to that, he was Chief Operating Officer of Kyphon Inc. from 2006 until the company's acquisition by Medtronic in November 2007, having served as Chief Financial Officer of Kyphon from 2004 to 2006. Prior to joining Kyphon, he was Senior Vice President, Chief Financial Officer of Terayon Communication Systems, Inc., a broadband access company, from February 2003 through August 2004. Mr. Taylor gained experience in the medical device industry while serving as Chief Financial Offi-

cer for ReSound Corporation, a hearing healthcare company, and in several executive financial positions over fourteen years with Allergan, Inc., an eye care medical device and pharmaceutical company, and American Hospital Supply Corporation, which was acquired by Baxter International. In addition, Mr. Taylor previously served as Vice President, Corporate Treasurer for 3Com Corporation.

Gregory Turnbull has served as a member of our board of directors since February 1986, has served as our President and Chief Executive Officer since October 2006 and as interim Chief Financial Officer since January 2008. Mr. Turnbull has been a private investor and business consultant for over five years. Previously, he was a general partner of Cable & Howse Ventures, a venture capital firm, and also served as an investment banker with Morgan Stanley & Co. and White, Weld & Co. Mr. Turnbull also serves as Chairman of the Board for Planar Systems, Inc. and as a director of certain privately-held companies.

Robert Zerbe, M.D. has served as a member of our board of directors since December 2002. Dr. Zerbe has served as the Chief Executive Officer and founder of QuatRx Pharmaceuticals Company, a private biopharmaceutical company since 2000. Until 2000, Dr. Zerbe was employed by Pfizer as the Senior Vice President of Global Research and Development and Director of Development Operations. From 1993 to 2000, Dr. Zerbe served at the Parke-Davis Pharmaceutical Research Division of Warner-Lambert as Senior Vice President worldwide, clinical research and development. Dr. Zerbe serves as a director of Anesiva, Inc. and Aastrom Biosciences, Inc.

The other executive officers of the Company and their ages and position with the Company are as follows:

Name	Age	Executive Position with Company	Since
John Barr, Ph.D.	48	Sr. Vice President of Research and Development	1997
Anastassios Retzios, Ph.D.	56	Vice President of Clinical Development	2006

John Barr, Ph.D. has served as our Senior Vice President, Research and Development since September 2007, having previously served as Vice President, Research and Development since August 2000. He joined us in 1997 as Director of Pharmaceutical Sciences. Dr. Barr has played a key role in evaluating and developing the potential of our novel delivery systems. Prior to joining us, he served as the Director of Biopharmaceutics for Cortech, Inc. a Denver-based biotech firm focused on the development of novel anti-inflammatory agents. In that capacity, he was involved with both the research and development aspects of the company's intravenous and oral programs. Dr. Barr received his Ph.D. in pharmacology from the University of Glasgow in Scotland, after which he pursued post-doctoral studies at the University of Arizona.

Anastassios Retzios, Ph.D. has served as our Vice President, Clinical Development since November 2006. Dr. Retzios has more than 18 years of experience in a wide range of clinical and regulatory matters, most recently as Director of Global Clinical Research and Development at Baxter International, Inc. from 2001 until 2006. Previously he served in senior clinical positions at Questcor Pharmaceuticals and Alpha Therapeutic Corporation. Dr. Retzios received his Ph.D. in molecular biology from University of Edinburgh, Scotland.

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

CORPORATE GOVERNANCE

The Company's Board of Directors met seven times during fiscal 2007. The audit committee met 4 times, the compensation and stock option committee met three times and the nominating and governance committee met one time, the finance committee met two times and the executive committee, which was formed late in the year, did not meet during fiscal 2007. Each member of the Board attended 75% or more of the aggregate number of Board and applicable committee meetings.

Board Independence

Our board of directors has determined that the following directors are "independent directors" as defined by the rules of The NASDAQ Stock Market: Messrs. Riepenhausen, Rosenblatt, Taylor and Zerbe. Under applicable SEC and Nasdaq rules, 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. None of these independent directors is a party to any transaction, relationship or arrangement not disclosed pursuant to Item 404(a) of Regulation S-K.

Board Committees

Our board of directors has standing audit, finance, compensation and stock option, nominating and governance, and executive committees. The composition and primary responsibilities of each committee are described below.

Audit Committee

Our audit committee currently consists of Messrs. Taylor (chair), Riepenhausen and Rosenblatt. Our audit committee oversees our corporate accounting and financial reporting process. Our audit committee appoints our independent auditor and oversees and evaluates their work, ensures written disclosures and communicates with the independent auditor, meets with management and the independent auditor to discuss our financial statements, meets with the independent auditor to discuss matters that may affect our financial statements and approves all related party transactions. Mr. Taylor is our audit committee financial expert under applicable SEC rules. We believe that the composition of our audit committee meets the requirements for independence under the current requirements of The NASDAQ Stock Market and applicable SEC rules and regulations.

Finance Committee

Our finance committee currently consists of Messrs. Turnbull (chair), Rosenblatt and Taylor. The finance committee is responsible for reviewing our plans for providing appropriate financial resources to sustain our operations, including review of our strategic plan and annual operating budget.

Compensation and Stock Option Committee

Our compensation and stock option committee currently consists of Messrs. Rosenblatt (chair) and Riepenhausen. Our compensation and stock option committee administers our benefit plans, reviews and administers all compensation arrangements for executive officers, and establishes and reviews general policies relating to the compensation and benefits of our officers and employees. Our compensation and stock option committee reviews and recommends goals for our executive officers and

evaluates their performance in light of these goals. We believe that the composition of our compensation and stock option committee meets the requirements for independence under the current requirements of The NASDAQ Stock Market and applicable SEC rules and regulations.

Nominating and Governance Committee

Our nominating and governance committee currently consists of Messrs. Rosenblatt (chair) and Riepenhausen. The committee recommends nominees to the board of directors and provides oversight with respect to corporate governance. Procedures for the consideration of director nominees recommended by stockholders are set forth in our amended and restated bylaws and are described below. We believe that the composition of our nominating and governance committee meets the requirements for independence under the current requirements of The NASDAQ Stock Market.

Executive Committee

Our executive committee currently consists of Messrs. Goddard, Turnbull and Rosenblatt. The committee serves as an administrative committee of the board of directors to act upon and facilitate the consideration by senior management and the board of directors of certain high-level business and strategic matters.

Charters for our audit, compensation and stock option, and nominating and governance committees are posted on our website at www.appharma.com.

Director Nomination

Criteria for Board Membership

In selecting candidates for appointment or re-election to the Board, the nominating and governance committee (the "nominating committee") considers the appropriate balance of experience, skills and characteristics required of the Board of Directors, and seeks to insure that at least a majority of the directors are independent under the rules of the Nasdaq Stock Market, and that members of the Company's audit committee meet the financial literacy and sophistication requirements under the rules of the Nasdaq Stock Market and at least one of them qualifies as an "audit committee financial expert" under the rules of the Securities and Exchange Commission. Nominees for director are selected on the basis of their depth and breadth of experience, integrity, ability to make independent analytical inquiries, understanding of the Company's business environment, and willingness to devote adequate time to Board duties.

Stockholder Nominees

The nominating committee will consider written proposals from stockholders for nominees for director. Any such nominations should be submitted to the nominating committee c/o the Secretary of the Company and should include the following information: (a) all information relating to such nominee that is required to be disclosed pursuant to Regulation 14A under the Securities Exchange Act of 1934 (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); (b) the names and addresses of the stockholders making the nomination and the number of shares of the Company's common stock which are owned beneficially and of record by such stockholders; and

(c) appropriate biographical information and a statement as to the qualification of the nominee, and should be submitted in the time frame described under the caption, "Stockholder Proposals for 2009 Annual Meeting" below.

Process for Identifying and Evaluating Nominees

The nominating 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 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 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 committee deems appropriate, a third-party search firm. The nominating 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 committee. Candidates meriting serious consideration will meet with all members of the Board. Based on this input, the nominating committee will evaluate which of the prospective candidates is qualified to serve as a director and whether the 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.

The Company has never received a proposal from a stockholder to nominate a director. Although the nominating committee has not adopted a formal policy with respect to stockholder nominees, the committee expects that the evaluation process for a stockholder nominee would be similar to the process outlined above.

Board Nominees for the 2008 Annual Meeting

Each of the nominees listed in this Proxy Statement is a current director standing for re-election.

COMMUNICATIONS WITH DIRECTORS

Stockholders who wish to communicate with our Directors may do so using the procedures detailed on our website at www.appharma.com on the Corporate Governance page of the Corporate Overview section.

The Company has a policy of encouraging all directors to attend the annual stockholder meetings. Directors O'Connell, Rosenblatt, Turnbull and Zerbe attended the 2007 annual meeting.

CODE OF ETHICS

The Company has adopted a code of ethics that applies to all directors, officers and employees. This code of ethics can be viewed on our website at <http://www.appharma.com> on the Corporate Governance page of the Corporate Overview section.

SECURITY OWNERSHIP BY CERTAIN BENEFICIAL HOLDERS

The following table sets forth information regarding ownership of the Common Stock as of March 31, 2008 or earlier date for information based on filings with the Securities and Exchange Commission 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 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. Unless otherwise indicated, the address of each of the named individuals is c/o A.P. Pharma, Inc., 123 Saginaw Drive, Redwood City, CA 94063. 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 March 31, 2008. 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 are subject to pledge.

Name	Number of Shares ⁽¹⁾	Percent of Class ⁽¹⁾
Tang Capital Management, LLC and its affiliates ⁽²⁾ 4401 Eastgate Mall San Diego, California 92121	4,614,658	15.0%
Visium Asset Management, LLC and its affiliates ⁽³⁾ 950 Third Avenue New York, New York 10022	2,918,194	9.5%
RA Capital Management, LLC and its affiliates ⁽⁴⁾ 111 Huntington Avenue, Suite 610 Boston, Massachusetts 02199	2,691,671	8.7%
Deerfield Management Company, L.P. and its affiliates ⁽⁵⁾ 780 Third Avenue, 37 th Floor New York, New York 10017	2,383,712	7.7%
OrbiMed Advisors, LLC and its affiliates ⁽⁶⁾ 767 Third Avenue, 30th Floor New York, New York 10017	2,325,000	7.5%
Gregory Turnbull ⁽⁷⁾ President and Chief Executive Officer and Director	197,584	*
Michael O'Connell ⁽⁸⁾ Former Chief Operating Officer and Chief Financial Officer and Director	167,629	*
Paul Goddard ⁽⁹⁾ Chairman of the Board	120,750	*
Toby Rosenblatt ⁽¹⁰⁾ Director	93,182	*
John Barr ⁽¹¹⁾ Senior Vice President, Research and Development	86,210	*
Peter Riepenhausen ⁽¹²⁾ Director	71,400	*
Robert Zerbe ⁽¹³⁾ Director	29,389	*
Anastassios Retzios ⁽¹⁴⁾ Vice President, Clinical Development	16,591	*
Arthur Taylor ⁽¹⁵⁾ Director	7,063	*
Officers and Directors as a group (9 persons)	789,798	2.5%

* Less than 1%.

- (1) Assumes the exercise of all outstanding options to purchase Common Stock held by such person or group to the extent exercisable on or before May 30, 2008, and that no other person has exercised any outstanding stock options. Based on shares of Common Stock issued and outstanding as of March 31, 2008.
- (2) Based on information set forth in a Schedule 13G/A filed with the Securities and Exchange Commission on February 14, 2008 by Tang Capital Management, LLC and its affiliates reporting the sole power to vote, to dispose or direct the disposition of 4,614,658 shares.
- (3) Based on information set forth in a Schedule 13F filed with the Securities and Exchange Commission as of December 31, 2007 by Visium Asset Management, LLC and its affiliates reporting the sole power to vote, to dispose or direct the disposition of 2,918,194 shares.
- (4) Based on information set forth in a Schedule 13G/A filed with the Securities and Exchange Commission on February 14, 2008 by RA Capital Management, LLC and its affiliates reporting the sole power to vote, to dispose or direct the disposition of 2,691,671 shares.
- (5) Based on information set forth in a Schedule 13G/a filed with the Securities and Exchange Commission on February 14, 2008 by Deerfield Management Company, L.P. and its affiliates reporting the sole power to vote, to dispose or direct the disposition of 2,383,712 shares.
- (6) Based on information set forth in a Schedule 13G/A filed with the Securities and Exchange Commission on February 14, 2008 by OrbiMed Advisors LLC and its affiliates reporting the sole power to vote, to dispose or direct the disposition of 2,325,000 shares.
- (7) Includes 141,250 shares underlying stock options exercisable on or before May 30, 2008 and 3,000 shares of restricted stock subject to right of repurchase which lapses on May 23, 2008.
- (8) Includes 120,313 shares underlying stock options exercisable on or before May 30, 2008 and 12,500 shares of restricted stock subject to right of repurchase which lapses on March 23, 2009.
- (9) Includes 11,250 shares held in family trust and 83,750 shares underlying stock options exercisable on or before May 30, 2008.
- (10) Includes 40,000 shares held in family partnership, 25,000 shares underlying stock options exercisable on or before May 30, 2008 and 3,000 shares of restricted stock subject to right of repurchase which lapses on May 23, 2008.
- (11) Includes 66,355 shares underlying stock options exercisable on or before May 30, 2008 and 6,250 shares of restricted stock subject to right of repurchase which lapses on March 23, 2009.
- (12) Includes 44,833 shares held in family trust, 17,500 shares underlying stock options exercisable on or before May 30, 2008 and 3,000 shares of restricted stock subject to right of repurchase which lapses on May 23, 2008.
- (13) Includes 16,250 shares underlying stock options exercisable on or before May 30, 2008 and 3,000 shares of restricted stock subject to right of repurchase which lapses on May 23, 2008.
- (14) Includes 16,591 shares underlying stock options exercisable on or before May 30, 2008.
- (15) Includes 4,063 shares underlying stock options exercisable on or before May 30, 2008 and 3,000 shares of restricted stock subject to right of repurchase which lapses on May 23, 2008.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Except as discussed under the section titled "Chairman Compensation" below, we are not a party to any related party transactions. Pursuant to our Code of Ethics and the Audit Committee Charter, our executive officers, directors and employees must disclose transactions involving actual or apparent conflicts of interests, such as related party transactions, to the chairman of the audit committee. The audit committee is charged with reviewing and approving all related party transactions.

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.

EXECUTIVE COMPENSATION

The following tables and descriptive materials set forth information concerning compensation earned for services rendered to the Company by the Chief Executive Officer (the "CEO"), and the Company's next three most highly compensated executive officers for fiscal year 2007 whose salary and bonus for the fiscal year 2007 exceeded \$100,000. Collectively, together with the CEO, these are the "Named Executive Officers".

Summary Compensation Table

The following table set forth information concerning compensation earned for services rendered to the Company by the Named Executive Officers.

Name and Principal Position(s)	Year	Salary	Stock Awards ⁽¹⁾	Option Awards ⁽¹⁾	Non-Equity Incentive Plan Compensation ⁽²⁾	All Other Compensation ⁽³⁾	Total
Gregory Turnbull ⁽⁴⁾	2007	\$418,000	\$ 9,035	\$ 52,285	\$ —	\$ 31,000	\$510,320
President and Chief Executive Officer	2006	38,077	5,072	48,335	—	30,584	122,068
Michael O'Connell ⁽⁵⁾	2007	227,585	21,204	34,794	47,793	18,447	349,823
Former Chief Executive Officer, Chief Operating Officer and Chief Financial Officer	2006	345,296	21,111	53,763	24,775	17,400	462,345
John Barr	2007	262,154	10,602	32,902	55,052	17,021	377,731
Sr. Vice President, Research and Development	2006	239,608	10,555	16,602	17,192	14,400	298,357
Anastassios Retzios	2007	208,077	—	20,562	31,212	6,242	266,093
Vice President, Clinical Research	2006	19,712	—	2,310	30,000	—	52,022

(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*, which requires that we recognize as compensation expense the value of all stock-based awards, including stock options, attributable to awards granted in and prior to 2007. Assumptions used in the calculation of these amounts are disclosed in Note 7 to the Company's Financial Statements for the year ended December 31, 2007, included in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2008. However, as required, amounts exclude the impact of estimated forfeitures related to service-based vesting conditions.

(2) The amounts listed were earned in 2006 and 2007 and paid in January 2007 and 2008 respectively, and reflect cash awards to the named individuals under the MBO program.

- (3) The stated amounts include a travel allowance and our matching contributions to our 401(k) Plan. We made matching cash contributions equal to 50% of each participant's contribution during the plan year up to a maximum amount equal to the lesser of 3% of each participant's annual compensation or \$6,600. Mr. Turnbull does not participate in our MBO program or our 401(k) Plan, does not receive a travel allowance and does not participate in any other employee benefit plans; amounts listed are payments for his service as a director.
- (4) Mr. Turnbull became our President and Chief Executive Officer in October 2006. Prior to serving as President and Chief Executive Officer Mr. Turnbull served as an independent director on the board of directors. Compensation earned by Mr. Turnbull for his services as a director and included in the summary compensation table include: a) for 2007, a restricted stock award valued at \$9,035, option awards of \$11,720, and director fees reflected above in all other compensation of \$31,000 paid in cash; b) for 2006, a restricted stock award valued at \$5,072, option awards of \$14,326, and director fees, reflected above in all other compensation, amounting to \$9,000 paid in common stock and \$21,584 paid in cash.
- (5) Mr. O'Connell, who was then our Chief Executive Officer, began a temporary medical leave of absence as of October 9, 2006. On May 29, 2007, he assumed the position of our Chief Operating Officer. Effective June 1, 2007. Mr. O'Connell assumed additional responsibility as our Chief Financial Officer. Effective January 18, 2008, Mr. O'Connell resigned as our Chief Financial Officer and Chief Operating Officer.

401(k) Plan

We have established and maintain a retirement savings plan under section 401(k) of the Internal Revenue Code to cover our eligible employees. The Internal Revenue Code allows eligible employees to defer a portion of their compensation, within prescribed limits, on a tax deferred basis through contributions to a 401(k) plan. Our 401(k) plan is qualified under Section 401(a) of the Internal Revenue Code and its associated trust is exempt from federal income taxation under Section 501(a) of the Internal Revenue Code. Our 401(k) plan permits us to make matching contributions on behalf of eligible employees, and we currently make these matching contributions up to a maximum amount equal to the lesser of 3% of each participant's annual compensation or \$6,600.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information regarding outstanding equity awards held by our Named Executive Officers at December 31, 2007:

Name	Option Awards				Stock Awards	
	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Not Exercisable ⁽¹⁾	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 (\$)
Gregory Turnbull	—	2,500 ⁽⁴⁾	\$ 3.000	05/23/17	3,000 ⁽⁵⁾	\$ 4,620
	16,250 ⁽⁶⁾	—	4.600	10/09/16	—	—
	2,500 ⁽³⁾	—	6.960	05/31/16	—	—
	2,500 ⁽³⁾	—	6.400	05/25/15	—	—
	2,500 ⁽³⁾	—	11.756	05/25/14	—	—
	2,500 ⁽³⁾	—	4.840	05/28/13	—	—
	2,500 ⁽³⁾	—	9.360	05/22/12	—	—
	2,500 ⁽³⁾	—	11.800	05/09/11	—	—
	2,500 ⁽³⁾	—	14.000	07/31/10	—	—
	2,500 ⁽³⁾	—	23.500	06/16/09	—	—
	2,500 ⁽³⁾	—	27.252	06/10/08	—	—
Michael O'Connell	5,391	5,859	6.400	01/10/16	12,500 ⁽²⁾	19,250
	12,240	260	9.800	01/14/14	—	—
	10,000	—	4.280	01/23/13	—	—
	25,000	—	9.800	02/13/12	—	—
	6,250	—	12.500	01/25/11	—	—
	37,500	—	12.500	08/08/10	—	—
	7,500	—	18.500	12/16/08	—	—
	15,000	—	16.752	10/20/08	—	—
	2,000	—	25.500	01/13/08	—	—
3,000	—	25.500	01/13/08	—	—	
John Barr	2,005	6,745	5.120	01/16/17	6,250 ⁽²⁾	9,625
	4,193	4,557	6.400	01/10/16	—	—
	6,120	130	9.800	01/14/14	—	—
	1,875	—	4.280	01/23/13	—	—
	3,125	—	5.760	08/22/12	—	—
	8,750	—	8.000	08/21/11	—	—
	5,000	—	11.500	10/27/10	—	—
	7,500	—	13.376	08/01/10	—	—
	2,500	—	18.500	12/16/08	—	—
	3,750	—	16.752	10/20/08	—	—
3,750	—	24.000	06/23/08	—	—	
Anastassios Retzios	5,079	13,671	4.400	11/20/16	—	—

- (1) All unvested options vest monthly over the first four years of the ten-year option term, except where noted.
- (2) Stock award that fully vests March 23, 2009.
- (3) Options granted for director compensation that fully vested one year after the date of grant.
- (4) Option granted for director compensation that fully vests May 23, 2008.
- (5) Stock award received as director compensation that fully vests May 23, 2008.
- (6) Option granted upon appointment as President and Chief Executive Officer that vested April 9, 2007.

Payments Upon Termination or Change In Control

Payments Upon Termination

In 2000, the Company approved a Retention Incentive Plan ("Retention Plan") for Mr. O'Connell. The purpose of the Retention Plan was to encourage Mr. O'Connell to continue his employment with the Company, enhance his ability to perform effectively and provide the Company with the benefit of his continued service. Under the Retention Plan, the Company entered into a retention agreement with Mr. O'Connell providing that if Mr. O'Connell's full-time employment with us as President and Chief Executive Officer was terminated without cause or if he terminated his employment for good reason, as such terms are defined in his agreement, then, subject to his entering into a release with us, Mr. O'Connell would remain employed by us as a supplemental employee for a period of 24 months. During this 24-month period, Mr. O'Connell would receive his base salary in effect on the date of termination, with 50% of such salary payable in an initial lump sum payment and the remaining 50% payable in accordance with our normal payroll practices over the 24 months. He would also receive an annual bonus for the 24-month period that is equal to the bonus paid to Mr. O'Connell during the immediately preceding 12-month period as well as continued vesting of Mr. O'Connell's options during such 24-month period.

On March 23, 2005, we entered into an amended and restated retention agreement with Mr. O'Connell. The principal changes resulting from the amendment included adding (a) full accelerated vesting of options granted to Mr. O'Connell should his employment be terminated by the Company without cause or by him for good reason after a change of control, as such term is defined in his agreement, and (b) the lapse of restrictions on restricted stock held by him upon a change of control.

On May 25, 2007 and again on August 23, 2007, we amended this agreement without affecting any of its economic provisions to conform with the newly-promulgated technical provisions of Treasury Regulations under Section 409A of the Internal Revenue Code. During Mr. O'Connell's medical leave, which began in October 2006, he remained an employee and subject to the terms of this agreement. Upon his return to active employment as Chief Operating Officer and Chief Financial Officer in May and June of 2007, respectively, his potential reinstatement as President and Chief Executive Officer remained subject to consideration by the board of directors at such time as Mr. O'Connell was ready and able to assume all of the duties and responsibilities of that latter position. At a board of directors meeting on September 26, 2007 the board informed Mr. O'Connell that it did not intend to reinstate him as President and Chief Executive Officer. Under the terms of the retention agreement, Mr. O'Connell had a right, within the ninety day period following such notification, to give notice to us that the non-reinstatement decision has prompted his voluntary termination from the President and Chief Executive Officer position for good reason, which would then initiate his receipt of the benefits of the retention agreement, subject to a 30-day mitigation period by the Company. Mr. O'Connell exercised this right and effective January 18, 2008 submitted his resignation from the Company.

Potential Payments Upon Termination

On March 23, 2005, we entered into a change of control agreement with Dr. Barr. Dr. Barr's agreement was amended on November 8, 2007, to become a management retention agreement. This amended agreement provides that if Dr. Barr's employment is terminated by us without good cause or by him for good reason, as such terms are defined in his agreement, he shall receive his annual base salary in effect on the date of termination, the average of any bonus paid during each of the three 12-month periods prior to termination, and the continued vesting of his unvested stock options, all for a 12 month period following such termination, and the lapse of all remaining forfeiture and transfer restrictions on restricted stock previously granted to him. Such salary and bonus payments shall be paid in twelve equal monthly increments. In addition, upon a change of control, all of his unvested stock options shall immediately vest, and all restrictions on his restricted stock shall lapse.

The following table sets forth information regarding payments being made beginning in 2008 to Mr. O'Connell and potential payments to be made to Dr. Barr if his termination payments were triggered on December 31, 2007, assuming maximum payouts which would occur if a change of control had occurred.

Name	Base Salary (\$)	Bonus (\$)	Value of Options Previously Unvested (\$) ⁽¹⁾	Value of Restricted Stock Previously Subject to Repurchase (\$) ⁽²⁾
Michael O'Connell ⁽³⁾⁽⁵⁾	\$ 714,000	\$49,550	\$ —	\$ 19,750
John Barr ⁽⁴⁾	285,000	34,302	—	9,875

(1) The dollar value of unvested stock options was calculated using the closing market price of our common stock on December 31, 2007, which was lower than the exercise price of these options. It should be noted that Mr. O'Connell's options remain exercisable during the 24 month period that he remains a supplemental employee plus an additional 90 days; Dr. Barr's options would be exercisable for a 90 day period beyond his potential termination date.

(2) The dollar value of restricted stock, net of consideration paid by the named executive officer, was calculated using the closing market price of our common stock on December 31, 2007.

(3) Based on 6,119 shares of unvested stock options and 12,500 shares of restricted stock as of December 31, 2007.

(4) Based on 11,432 shares of unvested stock options and 6,250 shares of restricted stock as of December 31, 2007.

(5) Payments have begun in 2008 in accordance with the terms described above.

Director Compensation

Each director who is not an employee is eligible to receive compensation for his services as a member of our board of directors or any of its committees, except that Mr. Turnbull, our President and Chief Executive Officer, continues to receive non-employee directors' compensation as part of the overall compensation package awarded to him upon being appointed to his executive role in October, 2006.

Non-Chair Director Compensation

Each non-employee director other than the chairman of the board (a "non-employee director") receives an annual cash retainer of \$15,000. In addition, each non-employee director receives a cash payment of \$2,000 for each board of directors meeting attended in person or \$1,000 for each board of directors meeting attended via teleconference. Each member of the audit committee, finance committee, nominating and governance committee and compensation and stock option committee receives \$1,000 for attending each meeting of the committee in person and \$500 for attending each meeting of the committee via teleconference; provided, however, that per meeting fees are not paid for meetings held on the same day as another committee or board meeting for which a fee is paid. In addition, the committee chairs receive the following annual cash retainers:

- audit committee chair: \$5,000;
- finance committee chair: \$2,000;
- compensation and stock option committee chair: \$2,000; and
- nominating and governance committee chair: \$1,000.

Each non-employee director receives annually an option to acquire 2,500 shares of our common stock upon re-election at the annual stockholder meeting with the exercise price equal to the fair market value of our stock, as reflected by the closing price of our stock on the grant date. The options fully vest on the earlier of the one year anniversary date or the next year's annual stockholders meeting date.

In 2007, each non-employee director received a restricted stock award of 3,000 shares, upon re-election at the annual stockholder meeting. The restrictions lapse on the earlier of the one year anniversary date or the next year's annual stockholder meeting date.

Chairman Compensation

In 2000, the Company approved an agreement with Dr. Goddard, the chairman of our board, under which he received a stock option grant to acquire 18,750 shares of the Company's Common Stock. Twenty-five percent of the options vested at the end of twelve months and the balance vests in equal monthly installments for the next 36 months. The agreement provided that Dr. Goddard would receive additional option grants each year of 5,000 shares while he serves as chairman.

In September 2004, Dr. Goddard entered into an additional agreement with the Company to increase his involvement in the Company's activities. As compensation for his increased involvement, he received a stock option grant in September 2004 to acquire 30,000 shares of the Company's Common Stock. The option vested 25% after the first year and then monthly over a period of three years and fully vests on September 15, 2008. Under this new agreement, he is not entitled to receive the additional option grants of 5,000 shares annually. Additionally, effective March 6, 2005, Dr. Goddard's cash compensation was reduced to \$150,000. On August 23, 2005, Dr. Goddard's existing agreement was modified to reflect his reduced schedule. Since September 2005, he has not received an annual salary and instead has been compensated on a per diem basis for services performed.

The following table shows for 2007 certain information with respect to the compensation of all of our non-employee directors and our chairman.

Name ⁽¹⁾	Fees Earned or Paid in Cash	Stock Awards ⁽²⁾	Option Awards ⁽²⁾	All Other Compensation ⁽³⁾	Total
Paul Goddard ⁽⁴⁾	\$ —	\$ 25,003	\$ 22,467	\$ 110,000	\$157,470
Peter Riepenhausen ⁽⁵⁾	27,500	9,035	11,720	—	48,255
Toby Rosenblatt ⁽⁶⁾	37,000	9,035	11,720	—	57,755
Arthur Taylor ⁽⁷⁾	31,500	5,441	10,084	—	47,025
Robert Zerbe ⁽⁸⁾	26,500	9,035	11,720	1,000	48,255

- (1) Mr. O'Connell is not included in this table as he receives no compensation for his services as a director. The compensation received by Mr. O'Connell as an employee is shown in the Summary Compensation Table. Mr. Turnbull is not included in this table. The compensation received by Mr. Turnbull as an employee and director is shown in the Summary Compensation Table.
- (2) The value of the stock and option awards has been computed in accordance with Statement of Financial Standards (SFAS) No. 123R, *Share-Based Payment*, which requires that we recognize as compensation expense the value of all stock-based awards, including stock options, attributable to awards granted in and prior to 2007. Assumptions used in the calculation of these amounts are disclosed in Note 7 to the Company's Financial Statements for the year ended December 31, 2007, included in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2008. However, as required, amounts exclude the impact of estimated forfeitures related to service-based vesting conditions.
- (3) All other compensation includes consulting fees.
- (4) Dr. Goddard has seven option awards outstanding as of December 31, 2007. In January 2008, Dr. Goddard was awarded a bonus in recognition of his contributions during our common stock financing in mid-2007. This bonus was a cash bonus of \$50,000 (included in All Other Compensation) and a Stock Award of 18,250 shares (valued at \$25,003).
- (5) Mr. Riepenhausen has one stock award and seven option awards outstanding as of December 31, 2007.
- (6) Mr. Rosenblatt has one stock award and ten option awards outstanding as of December 31, 2007.
- (7) Mr. Taylor has one stock award and two option awards outstanding as of December 31, 2007.
- (8) Dr. Zerbe has one stock award and five option awards outstanding as of December 31, 2007.

Equity Compensation Plan Information

The table below discloses information as of December 31, 2007 with respect to the Company's equity compensation plans that have been approved by stockholders and plans that have not been approved by stockholders.

Plan Category	(a) Number of Securities to be Issued upon Exercise of Outstanding Options	(b) Weighted-Average Exercise Price of Outstanding Options	(c) Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by security holders	469,758	\$ 9.20	3,085,434
Equity compensation plans not approved by security holders	80,625	4.91	979,010
Total	550,383	8.57	4,064,444

In October 2000, the Company adopted the Non-Qualified Stock Plan covering 62,500 shares. In September 2007, the Board, subject to approval by the Compensation and Stock Option Committee, authorized the reservation for issuance of an additional 1,000,000 shares under the plan and authorized amendments to the plan to limit participation awards to new hires, to provide for stock appreciation rights and to require the exercise price of any NQO to be at 100% or more of fair market value. The availability of the recently added shares for awards will expire in 2017. Under the Non-Qualified Plan, awards may be granted only as a material inducement to any new hire accepting employment or consultancy with the Company. The plan provides for the discretionary award of options, restricted stock and stock appreciation rights or any combination of these awards to an eligible person, provided however, that only NQOs may be granted under the plan. Under the plan, the term of any NQO granted may not exceed 10 years, and the exercise price of any such NQO must be at least 100% of the fair market value of the Common Stock at the date of grant. Options generally vest over a period of four years.

REPORT OF THE AUDIT COMMITTEE

Under the guidance of a written charter adopted by the Board of Directors, 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 for the compensation of the independent registered public accounting firm. Each of the members of the Audit Committee meets the independence requirements of Nasdaq.

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 U.S. generally accepted auditing standards.

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, 2007 with the Company's management and Odenberg, Ullakko, Muranishi & Co. LLP, the Company's independent registered public accounting firm;
- discussed with Odenberg, Ullakko, Muranishi & Co. LLP, the matters required to be discussed by Statement of Auditing Standards No. 61, Communication with Audit Committees, as amended by Statement of Auditing Standards No. 90, Audit Committee Communications;
- reviewed the written disclosures and the letter from Odenberg, Ullakko, Muranishi & Co. LLP required by the Independence Standards Board Standard No. 1, Independence Discussions with Audit Committees, discussed with Odenberg, Ullakko, Muranishi & Co. LLP their independence, and concluded that the non-audit services performed by Odenberg, Ullakko, Muranishi & Co. LLP are compatible with maintaining their independence;
- based on the foregoing reviews and discussions, recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007 filed with the SEC; and
- instructed Odenberg, Ullakko, Muranishi & Co. LLP that the Audit Committee expects to be advised if there are any subjects that require special attention.

AUDIT COMMITTEE

Peter Riepenhausen
Toby Rosenblatt
Arthur Taylor

Principal Accountant Fees and Services

The Audit Committee has appointed Odenberg, Ullakko, Muranishi & Co. LLP as the Company's independent registered public accounting firm for the year ending December 31, 2008.

The following table shows the fees paid or accrued by the Company for the audit and other services provided by Odenberg, Ullakko, Muranishi & Co. LLP for fiscal 2007 and 2006.

	2007	2006
Audit Fees ⁽¹⁾	\$190,500	\$190,500
Audit-Related Fees ⁽²⁾	—	—
Tax Fees ⁽³⁾	68,000	18,501
All other Fees ⁽⁴⁾	74,170	—
Total	\$332,670	\$209,001

The Board has delegated to 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 auditors and associated fees, provided that the Audit Committee shall report any decision to pre-approve such audit-related or non-audit services and fees to the full Board at its next regular meeting.

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 auditors and associated fees up to a maximum of \$25,000 during 2008, provided that the Chair shall 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, review of the Company's quarterly financial statements, and routine regulatory filings.
- (2) Audit-related fees consist primarily of accounting consultations, employee benefit plan audits, and services related to business acquisitions and divestitures.
- (3) Tax fees principally include fees for tax compliance and for Section 382 and FIN 48 consulting services. Tax compliance fees totaled \$18,501 for 2007 and 2006. Section 382 fees and FIN 48 fees totaled \$40,000 and \$4,495, respectively for 2007.
- (4) All other fees principally include the fees for professional services provided in connection with the Company's May 2007 financing.

PROPOSAL 1—ELECTION OF DIRECTORS

At the Annual Meeting, the stockholders will vote on the election of six directors to serve for a one-year term until the 2009 annual meeting of stockholders and until their successors are elected and qualified. The Board of Directors has unanimously nominated Messrs. Goddard, Riepenhausen, Rosenblatt, Taylor, Turnbull and Zerbe for election to the Board of Directors. The nominees have indicated that they are willing and able to serve as directors. If any of these individuals 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 of Directors. The proxies being solicited will be voted for no more than six nominees at the Annual Meeting. The Directors will be elected by a plurality of the 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 of Directors recommends a vote “for” the election of Messrs. Goddard, Riepenhausen, Rosenblatt, Taylor, Turnbull and Zerbe 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 Messrs. Goddard, Riepenhausen, Rosenblatt, Taylor, Turnbull and Zerbe.

PROPOSAL 2—RATIFICATION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

On January 26, 2006, the Company’s independent auditors, Ernst & Young LLP (“E&Y”), advised the Company that E&Y would resign as the Company’s independent registered public accounting firm effective upon the filing by the Company of its Form 10-K annual report for the year ended December 31, 2005.

The report of Ernst & Young LLP on the financial statements of the Company for the year ended December 31, 2005 did not contain any adverse opinion or disclaimer of opinion, nor was it qualified or modified as to uncertainty, audit scope or accounting principles.

During the fiscal year ended December 31, 2005 there were no disagreements with Ernst & Young LLP on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Ernst & Young LLP, would have caused it to make reference to the subject matter of the disagreements in connection with its report on the financial statements of the Company. No “reportable events”, as such term is defined in Item 304(a)(1)(v) of Regulation S-K, occurred within the fiscal year ended December 31, 2005 .

On March 31, 2006, the Audit Committee of the Company’s Board of Directors engaged Odenberg, Ullakko, Muranishi & Co. LLP as its independent registered public accounting firm for the year ending December 31, 2006. During the fiscal year ended December 31, 2005 and the subsequent interim period preceding the new appointment, neither the Company (nor someone on its behalf) consulted Odenberg, Ullakko, Muranishi & Co. LLP regarding either (i) the application of accounting principles to a specified transaction, either completed or proposed; or the type of audit opinion that might be rendered on the Company’s financial statements, and neither a written report nor oral advice was provided to the Company that was an important factor considered by the Company in reaching a decision as to the accounting, auditing or financial reporting issue; or (ii) any matter that was either the subject of a disagreement or a “reportable event.”

At the Annual Meeting, the stockholders will be entitled to ratify the appointment of Odenberg, Ullakko, Muranishi & Co. LLP as the Company's independent registered public accounting firm for the year ending December 31, 2008. Representatives of Odenberg, Ullakko, Muranishi & Co. 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 of Directors recommends a vote "for" the ratification of the appointment of Odenberg, Ullakko, Muranishi & Co. LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2008.

OTHER MATTERS

As of the time of preparation of this Proxy Statement, neither the Board of Directors 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.

STOCKHOLDERS SHARING THE SAME ADDRESS

In accordance with notices previously sent to many stockholders who hold their shares through a bank, broker or other holder of record (a "street-name stockholder") and share a single address, only one annual report and proxy statement is being delivered to that address unless contrary instructions from any stockholder at that address were received. This practice, known as "householding," is intended to reduce the Company's printing and postage costs. However, any such street-name stockholder residing at the same address who wishes to receive a separate copy of this Proxy Statement or accompanying Annual Report to Stockholders may request a copy by contacting the bank, broker or other holder of record, or the Company by telephone at (650) 366-2626. The voting instruction sent to a street-name stockholder should provide information on how to request (1) householding of future Company materials or (2) separate materials if only one set of documents is being sent to a household. If it does not, a stockholder who would like to make one of these requests should contact the Company as indicated above.

FORM 10-K

The Company's annual report to stockholders on Form 10-K for the year ended December 31, 2007, containing audited balance sheets as of December 31, 2007 and 2006 and audited statements of operations, stockholders' equity and cash flows for each of the last three years in the period ended December 31, 2007, is being mailed with this Proxy Statement to Stockholders entitled to notice of the annual meeting.

STOCKHOLDER PROPOSALS FOR 2009 ANNUAL MEETING

Under the rules of the Securities and Exchange Commission, stockholders who wish to submit proposals for inclusion in the Proxy Statement of the Board of Directors for the 2009 Annual Meeting of Stockholders must submit such proposals so as to be received by the Company at 123 Saginaw Drive, Redwood City, California 94063, on or before December 20, 2008. In addition, if the Company is not notified by March 7, 2009 of a proposal to be brought before the 2009 Annual Meeting 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

Julian N. Stern, Secretary

Redwood City, California
April 14, 2008

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 (1) over the Internet, (2) by telephone or (3) 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.

A.P. Pharma, Inc.
Proxy Solicited by the Board of Directors
for the Annual Meeting of Stockholders
to be Held May 28, 2008

The undersigned hereby appoints Paul Goddard and Gregory Turnbull or any one of them with full power of substitution, proxies to vote at the Annual Meeting of Stockholders of A.P. Pharma, Inc. (the "Company") to be held on May 28, 2008 at 9:00 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.

The Board of Directors recommends that you vote FOR the proposals on the reverse side. This proxy, when properly executed, will be voted in the manner directed. WHEN NO CHOICE IS INDICATED THIS PROXY WILL BE VOTED FOR THE FOLLOWING 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.

CONTINUED AND TO BE SIGNED ON REVERSE SIDE.

Telephone and Internet Voting Instructions

You can vote by telephone OR Internet! Available 24 hours a day 7 days a week!

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

To vote using the Telephone (within U.S. and Canada)	To vote using the Internet
Call toll free 1-800-652-VOTE (8683) in the United States or	Go to the following web site:
Canada any time on a touch tone telephone. There is NO CHARGE to you for the call.	WWW.INVESTORVOTE.COM
Follow the simple instructions provided by the recorded message.	Enter the information requested on your computer screen and follow the simple instructions.

VALIDATION DETAILS ARE LOCATED ON THE FRONT OF THIS FORM IN THE COLORED BAR.

If you vote by telephone or the Internet, please DO NOT mail back this proxy card.

Proxies submitted by telephone or the Internet must be received by 1:00 a.m., Central Time, on May 28, 2008.

THANK YOU FOR VOTING

Mark this box with an X if you have made changes to your name or address details above.

Annual Meeting Proxy Card

A Election of Directors

PLEASE REFER TO THE REVERSE SIDE FOR TELEPHONE AND INTERNET VOTING INSTRUCTIONS.

1. To elect as directors, to hold office until the next annual meeting of stockholders and until their successors are elected, the six nominees listed below.

	For	Withhold
01 - Paul Goddard	<input type="checkbox"/>	<input type="checkbox"/>
02 - Peter Riepenhausen	<input type="checkbox"/>	<input type="checkbox"/>
03 - Toby Rosenblatt	<input type="checkbox"/>	<input type="checkbox"/>
04 - Gregory Turnbull	<input type="checkbox"/>	<input type="checkbox"/>
05 - Arthur Taylor	<input type="checkbox"/>	<input type="checkbox"/>
06 - Robert Zerbe	<input type="checkbox"/>	<input type="checkbox"/>

B

The Board of Directors recommends a vote FOR the following proposals.

2. To ratify the appointment of Odenberg, Ullakko, Muranishi & Co. LLP as the Company's independent registered public accounting firm.

FOR	AGAINST	ABSTAIN
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. In their discretion, the proxyholders are authorized to transact such other business as properly may come before the meeting or any adjournments or postponements of the meeting. The Board of Directors at present knows of no other business to be presented by or on behalf of the Company or the Board of Directors at the meeting.

C Authorized Signatures—Sign Here—This section must be completed for your instructions to be executed.

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.

Signature 1 - Please keep signature within the box	Signature 2 - Please keep signature within the box	Date (mm/dd/yyyy)
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