

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

SCHEDULE 14A
(Rule 14a-101)

INFORMATION REQUIRED IN PROXY STATEMENT
SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934

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 Section 240.14a-12

Nile Therapeutics, Inc.

(Name of Registrant as Specified in Its Charter)

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:

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

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

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

(3) Filing Party:

(4) Date Filed:



**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON JULY 26, 2010**

To Our Stockholders:

You are cordially invited to attend the Annual Meeting of Stockholders of Nile Therapeutics, Inc., a Delaware corporation (the "Company"). The Annual Meeting will be held on Monday, July 26, 2010 at 9:00 a.m. (EDT) at 689 Fifth Avenue, 12th floor, New York, New York 10022, for the following purposes:

- (1) To elect seven directors to hold office until our 2011 Annual Meeting of Stockholders, or until their respective successors have been elected and have qualified, or until their earlier resignation or removal;
- (2) To ratify and approve an amendment to the Company's Amended and Restated 2005 Stock Option Plan to increase the number of shares of the Company's common stock issuable thereunder from 5,517,676 to 9,500,000 shares;
- (3) To ratify the appointment of Crowe Horwath LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2010; and
- (4) To transact such other business as may properly come before the meeting or any adjournment thereof.

The foregoing items of business are more fully described in the Proxy Statement accompanying this Notice. The record date for determining those stockholders who will be entitled to notice of, and to vote at, the meeting and at any adjournments thereof is June 10, 2010.

Whether or not you plan to attend the meeting, please vote as soon as possible. You may vote by mailing a completed proxy card. A postage-prepaid envelope is enclosed for the submission of your proxy card. You may revoke a previously delivered proxy at any time prior to the meeting. If you are a stockholder of record and decide to attend the meeting and wish to revoke your proxy, you may do so automatically by voting in person at the meeting. If your shares are held by a broker or other nominee, and you would like to vote in person at the meeting, you will need to obtain a legal proxy from your broker or nominee and present it at the meeting.

If you have any questions regarding the completion of the enclosed proxy card or would like directions to the meeting, please call (650) 458-2670.

By Order of The Board of Directors,
NILE THERAPEUTICS, INC.
/s/ Joshua A. Kazam
Joshua A. Kazam
Chief Executive Officer

San Mateo, California
June 15, 2010

IMPORTANT

TO ENSURE YOUR REPRESENTATION AT THE ANNUAL MEETING, PLEASE MARK, SIGN, DATE AND RETURN THE ENCLOSED PROXY CARD AS SOON AS POSSIBLE IN THE ENCLOSED POSTAGE-PREPAID ENVELOPE. IF YOU ATTEND THE ANNUAL MEETING, YOU MAY VOTE IN PERSON EVEN IF YOU RETURNED A PROXY.



4 West 4th Ave., Suite 400
San Mateo, California 94402

**2010 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD
JULY 26, 2010**

PROXY STATEMENT

SOLICITATION OF PROXIES

This proxy statement is furnished to our stockholders as of June 10, 2010, the record date, in connection with the solicitation of proxies by our Board of Directors for use at our annual meeting of stockholders, to be held at 689 Fifth Avenue, 12th floor, New York, New York 10022, on July 26, 2010, at 9:00 a.m. (EDT), and at any adjournments or postponements of the meeting. This proxy statement and the proxy card, together with a copy of our Annual Report on Form 10-K for our fiscal year ended December 31, 2009, is first being mailed to our stockholders on or about June 16, 2010. Our telephone number is (650) 458-2670.

**Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The proxy statement, proxy card, and Annual Report on Form 10-K are available at
http://www.nilethera.com/inv_sec.html**

**QUESTIONS AND ANSWERS REGARDING THIS SOLICITATION
AND VOTING AT THE MEETING**

Why am I receiving this proxy statement?

You are receiving this proxy statement from us because you were a stockholder of record at the close of business on the record date of June 10, 2010. As a stockholder of record, you are invited to attend our annual meeting of stockholders and are entitled to vote on the items of business described in this proxy statement. This proxy statement contains important information about the meeting and the items of business to be transacted at the meeting. You are strongly encouraged to read this proxy statement, which includes information that you may find useful in determining how to vote.

Who is entitled to attend and vote at the meeting?

Only holders of record of shares of our common stock at the close of business on June 10, 2010 (the record date) are entitled to notice of, to attend and to vote at the meeting and any adjournments or postponements of the meeting.

How many shares are outstanding?

On the record date, 34,560,824 shares of our common stock were issued and outstanding and held by approximately 184 holders of record, which does not include approximately 1,306 stockholders which hold our stock in "street name." Each share of common stock outstanding on the record date is entitled to one vote.

**How many shares must be present or represented to conduct business at the meeting (that is, what constitutes a quorum)?
What items of business will be voted on at the meeting?**

The presence at the meeting, in person or represented by proxy, of the holders of at least a majority of the shares of our common stock, issued and outstanding on the record date and entitled to vote at the meeting, will constitute a quorum for the transaction of business. If, however, a quorum is not present, in person or represented by proxy, then either the chairman of the meeting or the stockholders entitled to vote at the meeting may adjourn the meeting until a later time.

The items of business to be voted on at the meeting are as follows:

- (1) To elect seven directors to hold office until our 2011 Annual Meeting of Stockholders, or until their respective successors have been elected and have qualified, or until their earlier resignation or removal;
- (2) To ratify and approve an amendment to the Company's Amended and Restated 2005 Stock Option Plan to increase the number of shares of the Company's common stock issuable thereunder from 5,517,676 to 9,500,000 shares; and
- (3) To ratify the appointment of Crowe Horwath LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2010.

What happens if additional matters are presented at the meeting?

The only items of business that our Board of Directors intends to present at the meeting are set forth in this proxy statement. As of the date of this proxy statement, no stockholder has advised us of the intent to present any other matter, and we are not aware of any other matters to be presented at the meeting. If any other matter or matters are properly brought before the meeting, the person(s) named as your proxyholder(s) will have the discretion to vote your shares on the matters in accordance with their best judgment and as they deem advisable.

How does the Board of Directors recommend that I vote?

Our Board of Directors recommends that you vote your shares **"FOR"** the election of each of the director nominees, **"FOR"** the amendment to the Amended and Restated 2005 Stock Option Plan, and **"FOR"** the ratification of the appointment of Crowe Horwath LLP.

What shares can I vote at the meeting?

You may vote all of the shares you owned as of June 10, 2010, the record date, including shares held directly in your name as the *stockholder of record* and all shares held for you as the *beneficial owner* through a broker, trustee or other nominee such as a bank.

What is the difference between holding shares as a stockholder of record and as a beneficial owner?

Some of our stockholders hold their shares through a broker or other nominee rather than directly in their own name. As summarized below, there are some distinctions between shares held of record and those owned beneficially.

Stockholders of Record. If your shares are registered directly in your name with our transfer agent, American Stock Transfer and Trust Company, you are considered, with respect to those shares, the stockholder of record, and these proxy materials are being sent directly to you by us. As the stockholder of record, you have the right to vote in person at the meeting or direct the proxyholder how to vote your shares on your behalf at the meeting by fully completing, signing and dating the enclosed proxy card and returning it to us in the enclosed postage-paid return envelope.

Beneficial Owner. If your shares are held in a brokerage account or by a trustee or another nominee, you are considered the beneficial owner of shares held in street name, and these proxy materials are being forwarded to you together with a voting instruction card by your broker, trustee or other nominee. As the beneficial owner, you have the right to direct your broker, trustee or nominee to vote your shares as you instruct in the voting instruction card. The broker, trustee or other nominee may either vote in person at the meeting or grant a proxy and direct the proxyholder to vote your shares at the meeting as you instruct in the voting instruction card. You may also vote in person at the meeting, but only after you obtain a “legal proxy” from the broker, trustee or nominee that holds your shares, giving you the right to vote your shares at the meeting. Your broker, trustee or nominee has enclosed or provided a voting instruction card for you to use in directing the broker, trustee or nominee how to vote your shares.

How can I vote my shares without attending the meeting? As discussed previously, whether you hold shares directly as the stockholder of record or as a beneficial owner, you may direct how your shares are voted without attending the meeting by completing and returning the enclosed proxy card or voting instruction card. If you provide specific instructions with regard to items of business to be voted on at the meeting, your shares will be voted as you instruct on those items. Proxies properly signed, dated and submitted to us that do not contain voting instructions and are not revoked prior to the meeting will be voted “FOR” the election of each of the director nominees, “FOR” the amendment to the Amended and Restated 2005 Stock Option Plan, and “FOR” the ratification of the appointment of Crowe Horwath LLP.

How can I vote my shares in person at the meeting? Shares held in your name as the stockholder of record may be voted in person at the meeting. Shares held beneficially in street name may be voted in person only if you obtain a legal proxy from the broker, trustee or nominee that holds your shares giving you the right to vote the shares at the meeting. You should be prepared to present photo identification for admittance. Please also note that if you are not a stockholder of record but hold shares through a broker, trustee or nominee, you will need to provide proof of beneficial ownership as of the record date, such as your most recent brokerage account statement, a copy of the voting instruction card provided by your broker, trustee or nominee, or other similar evidence of ownership. The meeting will begin promptly at 9:00 a.m. (EDT). Check-in will begin at 8:30 a.m. (EDT). Even if you plan to attend the meeting, we recommend that you also complete, sign and date the enclosed proxy card or voting instruction card and return it promptly in the accompanying postage-paid return envelope in order to ensure that your vote will be counted if you later decide not to, or are unable to, attend the meeting.

Can I change my vote or revoke my proxy? You may change your vote or revoke your proxy at any time prior to the vote at the meeting. If you are the stockholder of record, you may change your vote by granting a new proxy bearing a later date, which automatically revokes the earlier proxy, by providing a written notice of revocation to our Corporate Secretary prior to your shares being voted, or by attending the meeting and voting in person. Attendance at the meeting will not cause your previously granted proxy to be revoked unless you specifically so request.

Is my vote confidential? If you are a beneficial owner, you may change your vote by submitting a new voting instruction card to your broker, trustee or nominee, or, if you have obtained a legal proxy from your broker, trustee or nominee giving you the right to vote your shares, by attending the meeting and voting in person. Proxy cards, voting instructions, ballots and voting tabulations that identify individual stockholders are handled in a manner that protects your voting privacy. Your vote will not be disclosed, except as required by law to American Stock Transfer and Trust Company, our transfer agent, to allow for the tabulation of votes and certification of the vote, and to facilitate a successful proxy solicitation.

How are votes counted and what vote is required to approve each item? Each outstanding share of our common stock entitles the holder to one vote per share on each matter considered at the meeting. Stockholders are not entitled to cumulate their votes in the election of directors or with respect to any matter submitted to a vote of the stockholders.

Proposal No. 1 The election of directors requires a plurality of the votes cast for the election of directors and, accordingly, the director nominees receiving the highest number of affirmative “FOR” votes at the meeting will be elected to serve as directors. You may vote either “FOR” or “WITHHOLD” your vote for the director nominees. A properly executed proxy marked “WITHHOLD” 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.

Proposal No. 2 Stockholder ratification and approval of the amendment to the Company’s Amended and Restated 2005 Stock Option Plan requires the affirmative vote of a majority of the votes cast. You may vote either “FOR” or “AGAINST” the proposed amendment, or you may “ABSTAIN.” Abstentions and broker non-votes will be counted for purposes of determining whether there is a quorum. Abstentions will also be counted towards the number of votes cast and will thus have the same effect as “AGAINST” votes. Broker non-votes will not be counted towards the number of votes cast and will have no effect on whether the proposal is approved.

Proposal No. 3 Stockholder ratification of the appointment of Crowe Horwath LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2010 is not required by law or by governing instruments. Our Board of Directors, however, is submitting the selection of Crowe Horwath LLP to our stockholders for ratification as a matter of good corporate governance and practice. The ratification of the appointment of Crowe Horwath LLP requires the affirmative vote of a majority of the votes cast. You may vote either “FOR” or “AGAINST” ratification of the appointment, or you may abstain. A properly executed proxy marked “ABSTAIN” with respect to the ratification of the appointment will not be voted with respect to such ratification, although it will be counted for purposes of determining both whether there is a quorum and the total number of votes cast with respect to the proposal and will thus have the same effect as a vote “AGAINST” the proposal. If the stockholders fail to ratify the appointment, the audit committee of our Board of Directors will reconsider whether or not to retain that firm.

What is a “broker non-vote”? Under the rules that govern brokers and banks who have record ownership of our shares of common stock that are held in street name for their clients such as you, who are the beneficial owners of the shares, brokers and banks have the discretion to vote such shares on routine matters. For non-routine matters, brokers and banks do not have such discretion, resulting in a broker non-vote.

How are “broker non-votes” counted? Broker non-votes will be counted as present for the purpose of determining the presence or absence of a quorum for the transaction of business, but they will *not* be counted in tabulating the voting result for any particular proposal.

How are abstentions counted? If you return a proxy card that indicates an abstention from voting on one or more proposals, the shares represented by your proxy will be counted as present for the purpose of determining both the presence of a quorum and the total number of votes cast with respect to a proposal (other than the election of directors), but they will not be counted in tabulating the voting results for any particular proposal. As a result, an abstention will have the same effect as a vote against a proposal (other than the election of directors).

What happens if the meeting is adjourned? If our annual meeting is adjourned to another time and place, no additional notice will be given of the adjourned meeting if the time and place of the adjourned meeting is announced at the annual meeting, unless the adjournment is for more than 30 days, in which case a notice of the adjourned meeting will be given to each stockholder of record entitled to vote at the adjourned meeting. At the adjourned meeting, we may transact any items of business that might have been transacted at the annual meeting.

Who will serve as inspector of elections? A representative of American Stock Transfer and Trust Company, our transfer agent, will tabulate the votes and act as inspector of elections at the meeting.

What should I do in the event that I receive more than one set of proxy materials?

You may receive more than one set of these proxy solicitation materials, including multiple copies of this proxy statement and multiple proxy cards or voting instruction cards. For example, if you hold your shares in more than one brokerage account, you may receive a separate voting instruction card for each brokerage account in which you hold shares. In addition, if you are a stockholder of record and your shares are registered in more than one name, you may receive more than one proxy card. Please complete, sign, date and return each proxy card and voting instruction card that you receive to ensure that all your shares are voted.

Who is soliciting my vote and who will bear the costs of this solicitation?

The enclosed proxy is being solicited on behalf of our Board of Directors. We will bear the entire cost of solicitation of proxies, including preparation, assembly, printing and mailing of this proxy statement. In addition to solicitation by mail, our directors, officers and employees may also solicit proxies in person, by telephone, by electronic mail or by other means of communication. We will not pay any additional compensation to our directors, officers or other employees for soliciting proxies. Copies of the proxy materials will be furnished to brokerage firms, banks, trustees, custodians and other nominees holding beneficially owned shares of our common stock, who will forward the proxy materials to the beneficial owners. We may, at our discretion, reimburse brokerage firms, banks, trustees, custodians and other agents for the costs of forwarding the proxy materials. Our costs for forwarding proxy materials will not be significant. We intend to announce preliminary voting results at the meeting, and publish the final voting results in a Current Report on Form 8-K that we expect to file within four business days after the meeting.

Where can I find the voting results of the meeting?

What is the deadline for submitting proposals for consideration at next year's annual meeting of stockholders or to nominate individuals to serve as directors?

As a stockholder, you may be entitled to present proposals for action at a future meeting of stockholders, including director nominations.

Stockholder Proposals

Under the rules of the Securities and Exchange Commission, or SEC, for stockholder proposals to be considered for inclusion in the proxy statement for the 2010 Annual Meeting, they must be submitted in writing to our Corporate Secretary, Nile Therapeutics, Inc., 4 West 4th Ave., Suite 400, San Mateo, California 94402. For a stockholder proposal to be considered for inclusion in our proxy statement for the 2011 Annual Meeting, the proposal must be in writing and received by us no later than February 16, 2011, or such proposal will be considered untimely under the Securities Exchange Act of 1934, as amended, or the Exchange Act. If the date of our 2011 Annual Meeting is more than 30 days before or 30 days after the anniversary date of our 2010 Annual Meeting, the deadline for inclusion of a stockholder proposal in our proxy statement will instead be a reasonable time before we begin to print and mail our proxy materials. Stockholder proposals must comply with the requirements of Rule 14a-8 of the Exchange Act and any other applicable rules established by the Securities and Exchange Commission. Stockholders are also advised to review our certificate of incorporation and bylaws, which contain additional requirements with respect to advance notice of stockholder proposals.

Nomination of Director Candidates

Any proposals for director candidates for consideration by our Board of Directors must be in writing and include the nominee's name and qualifications for board membership and should be directed to our Corporate Secretary at our principal executive offices. Stockholders are advised to review our bylaws, which contain additional requirements with respect to stockholder nominees for our Board of Directors. In addition, the stockholder must give timely notice to our Corporate Secretary in accordance with the provisions of our bylaws, which require that the notice be received by our Corporate Secretary at least 30 days prior to the 2011 Annual Meeting.

In accordance with Delaware law, a list of stockholders entitled to vote at the meeting will be available at the meeting, and for 10 days prior to the meeting at our offices located at 4 West 4th Ave., Suite 400, San Mateo, California 94402 between the hours of 9:00 a.m. and 5:00 p.m. Pacific Time.

PROPOSAL NO. 1:

ELECTION OF DIRECTORS

NOMINEES

The Company's Board of Directors currently consists of seven members. Each of the seven directors has been nominated for re-election at the Annual Meeting. Unless otherwise instructed, the proxy holders will vote the proxies received by them at the Annual Meeting for the seven current directors of the Company named as nominees below. The proxies cannot be voted for a greater number of persons than the number of nominees nominated. If any nominee is unable or declines to serve as a director at the time of the Annual Meeting, the proxies will be voted for any nominee who shall be designated by the present Board of Directors to fill the vacancy. It is not expected that any nominee will be unable to or will decline to serve as a director. If stockholders nominate additional persons for election as directors, the proxy holder will vote all proxies received by him to assure the election of as many of the Board of Directors' nominees as possible, with the proxy holder making any required selection of specific nominees to be voted for. The term of office of each person elected as a director will continue until the next Annual Meeting of Stockholders wherein directors are elected, or until such person's successor has been elected.

VOTE REQUIRED

The seven nominees receiving the highest number of affirmative votes of the votes cast shall be elected as directors of the Company for the ensuing year.

RECOMMENDATION

The Board of Directors unanimously recommends that the stockholders vote "FOR" each of the nominees named in this Proposal No. 1. Unless you indicate otherwise, your proxy will be voted "FOR" each of Messrs. Belldegrun, Granadillo, Kash, Kazam, Litvack, Mieyal and Schafer.

DIRECTOR NOMINEES

Set forth below is information regarding each nominee for election to our Board of Directors, including his age as of the date of the Annual Meeting, his positions and offices held with the Company and certain biographical information:

<u>Name of Nominee</u>	<u>Age</u>	<u>Position Held</u>	<u>Director Since</u>
Arie S. Belldegrun, M.D.	60	Director	September 2009
Pedro Granadillo	63	Director	October 2007
Peter M. Kash	48	Chairman of the Board	September 2007
Joshua A. Kazam	33	Director	September 2007
Frank Litvack, M.D.	54	Director	September 2009
Paul A. Mieyal, Ph.D.	40	Director	September 2007
Gregory W. Schafer	46	Director	January 2008

Set forth below are descriptions of the backgrounds of each member of the Board of Directors, his principal occupations for at least the past five years and his current public-company directorships.

Arie S. Belldegrun, M.D., FACS has been a director of Nile since September 2009. Dr. Belldegrun is Director of the Institute of Urologic Oncology at UCLA, Professor of Urology and Chief of the Division of Urologic Oncology. He holds the Roy and Carol Doumani Chair in Urologic Oncology at the David Geffen School of Medicine at the University of California, Los Angeles (UCLA). In 1997, Dr. Belldegrun founded Agensys, Inc., an early-stage privately-held biotechnology company based in Los Angeles, California, that is focused on the development of fully human monoclonal antibodies to treat solid tumor cancers in a variety of cancer targets. Dr. Belldegrun served as founding Chairman of Agensys from 1997 to 2002 and then as a director until December 2007, when the company was acquired by Astellas Pharma. Dr. Belldegrun served as Vice Chairman of the Board and Chairman of the Scientific Advisory Board of Cougar Biotechnology, Inc., a Los Angeles-based biopharmaceutical company, from December 2003 until its acquisition by Johnson & Johnson in July 2009. From February 2004 to December 2009, Dr. Belldegrun also served on the Board of

Directors of Hana Biosciences, Inc., a publicly-held biopharmaceutical company. He is also Chairman and Partner of Two River Group Holdings LLC, a New York based venture capital firm. Dr. Belldegrun's prior experience also includes serving as principal investigator of more than 50 clinical trials of anti-cancer drug candidates and therapies. Dr. Belldegrun completed his M.D. at the Hebrew University Hadassah Medical School in Jerusalem, his post graduate fellowship at the Weizmann Institute of Science and his residency in Urological Oncology at Harvard Medical School. Prior to UCLA, Dr. Belldegrun was at the National Cancer Institute/NIH as a research fellow in surgical oncology under Steven A. Rosenberg, M.D., Ph.D. He is certified by the American Board of Urology and is a Fellow of the American College of Surgeons and the American Association of Genitourinary Surgeons.

Pedro Granadillo has served as a director of the Company since October 2007, and also serves as Chairman of the Compensation Committee and as a member of the Nominating and Corporate Governance Committee and Audit Committee. Mr. Granadillo served as Senior Vice President for Eli Lilly and Company, or Lilly, until 2004 when he retired after 34 years of service. He was a member of Lilly's Policy Committee, which was comprised of its top seven executives. As Lilly's top human resources, manufacturing and quality executive, he was responsible for policies affecting a global workforce of more than 45,000 employees, as well as a broad network of manufacturing facilities for its extensive line of products. He also oversaw more than 20 sites and 13,000 employees involved in the manufacturing of Lilly's conventional "small-molecule" pharmaceuticals and "large-molecule" biotech therapies. Mr. Granadillo currently serves as a director of Dendreon Corp., Noven Pharmaceuticals, Inc. and Haemonetics Corporation, all of which are publicly-held biopharmaceutical companies. Mr. Granadillo received his B.S. in Industrial Engineering from Purdue University.

Peter M. Kash has served as a director of the Company since its inception in August 2005, and also currently serves as the non-executive Chairman of the Board, Chairman of the Nominating and Corporate Governance Committee and a member of the Compensation Committee. Mr. Kash has also served as a director of Arno Therapeutics, Inc., a New Jersey-based biopharmaceutical company focused on the treatment of cancer patients, since its inception in August 2005. From December 2004 to December 2006, Mr. Kash served as a director of Javelin Pharmaceuticals, Inc., a publicly-held biopharmaceutical company focused on pain management. In September 2004, Mr. Kash co-founded Two River Group Holdings, LLC, a venture capital firm that specializes in the creation of new companies to acquire rights to commercially develop early stage biotechnology products. He serves as President of Two River Group Management, LLC, the managing member of Two River Group Holdings, LLC. Mr. Kash is also the President and Chairman of Riverbank Capital Securities, Inc., a broker-dealer registered with the Financial Industry Regulatory Authority, or FINRA (formerly NASD). From 1992 until 2004, Mr. Kash was a Senior Managing Director of Paramount BioCapital, Inc., a FINRA member broker-dealer, specializing in conducting private financings for public and private development stage biotechnology companies as well as Paramount BioCapital Investments, LLC, a venture capital company. Mr. Kash also served as Director of Paramount Capital Asset Management, Inc., the general partner of several biotechnology-related hedge funds and as member of the General Partner of the Orion Biomedical Fund, LP, a private equity fund. Mr. Kash received his B.S. in Management Science from SUNY Binghamton and his M.B.A. in Banking and International Finance from Pace University. Mr. Kash is currently completing his doctorate in education at Yeshiva University.

Joshua A. Kazam has served as our non-employee President and Chief Executive Officer since June 2009, and has served as a director of the Company since inception in August 2005. In September 2004, Mr. Kazam co-founded Two River Group Holdings, LLC, and currently serves as Vice President and Director of Two River's managing member, Two River Group Management, LLC. Mr. Kazam also serves as an Officer and Director of Riverbank Capital Securities, Inc. From 1999 to 2004, Mr. Kazam was a Managing Director of Paramount BioCapital, Inc. where he was responsible for ongoing operations of venture investments, and as the Director of Investment for the Orion Biomedical Fund, LP. Mr. Kazam currently serves as a director of several privately-held biotechnology and biopharmaceutical companies, including Arno Therapeutics, Inc. (since its August 2005 inception), and Velcera, Inc. (since its inception in May 2004). Mr. Kazam is a graduate of the Wharton School of the University of Pennsylvania.

Frank Litvack, M.D. has been a director of the Company since September 2009. Dr. Litvack served as Chairman (from 2002) and CEO (from 2003) of Conor MedSystems, Inc., a publicly-held company focused on the development of vascular drug delivery systems, until its acquisition by Johnson & Johnson in February 2007. From 2000 to 2005, Dr. Litvack was Chairman of Savacor, Inc., a medical device company that was acquired by St. Jude Medical, Inc. in late 2005. Since 2000, Dr. Litvack has been a Professor of Medicine at University of California, Los Angeles. From 1989 until 1997, Dr. Litvack was a founder and director of Progressive Angioplasty Systems Inc., which was acquired by United States Surgical Corporation. Since 1996, Dr. Litvack has been a member of Calmedica, LLC. Since 1985, Dr. Litvack has been an attending cardiologist at Cedars-Sinai Medical Center. Dr. Litvack co-directed the Cardiovascular Intervention Center at Cedars-Sinai Medical Center from 1986 to 2000. Dr. Litvack currently serves as a director of several privately-held corporations. Dr. Litvack holds an M.D. from McGill University.

Paul Mieval, Ph.D., CFA has served as a director of the Company since September 2007, and also serves as a member of the Audit Committee and the Compensation Committee. Since 2006, Dr. Mieval has served as a Vice President of Wexford Capital LP, or Wexford, an SEC registered investment advisor located in Greenwich, CT. Prior to that, from 2000 to 2006, he was Vice President in charge of healthcare investments for Wechsler & Co., Inc., a private investment firm and registered broker-dealer. Dr. Mieval serves as a director of Nephros, Inc. a publicly held company. Dr. Mieval received his Ph.D. in Pharmacology from New York Medical College, a B.A. in chemistry and psychology from Case Western Reserve University, and is a Chartered Financial Analyst.

Gregory W. Schafer has served as a director of the Company since January 2008, and also serves as Chairman of the Audit Committee. Mr. Schafer has served as Chief Financial Officer Jennerex, a biotherapeutics company focused in oncology, since June 2010. From April 2009 to June 2010, Mr. Schafer served as an independent consultant to private and public biotechnology companies. From April 2006 to January 2009, Mr. Schafer served as the Vice President and Chief Financial Officer of Onyx Pharmaceuticals, Inc. Prior to Onyx, from 2004 to 2006, Mr. Schafer served as a consultant to several private and public biotechnology companies. From 1997 to 2004, Mr. Schafer held various executive positions at Cerus Corporation, a public biotechnology company, including Vice President and Chief Financial Officer. Prior to joining Cerus, Mr. Schafer worked as a management consultant for Deloitte & Touche LLP. Mr. Schafer holds an M.B.A from the Anderson Graduate School of Management at UCLA and a BSE in Mechanical Engineering from the University of Pennsylvania.

COMPENSATION OF DIRECTORS

On July 21, 2009, the Compensation Committee of our Board of Directors approved a compensation plan for our non-employee directors. Under the newly adopted plan, the Company will not pay cash compensation to its directors, who are instead entitled to receive annual stock option grants relating to 65,000 shares of the Company's common stock. The chairmen of our Board of Directors and of its Audit and Compensation Committees are entitled to annual stock options to purchase an additional 15,000 shares. Newly appointed directors are entitled to an initial stock option to purchase 130,000 shares.

Prior to the adoption of this plan, our non-employee directors did not receive any cash fees for their service, but were periodically awarded stock options. The following table sets forth the compensation received by our directors for their service in 2009.

Name ⁽¹⁾	Fees Earned or Paid in Cash	Option Awards ⁽²⁾	Total
Arie Beldegrun, M.D.	\$ —	\$ 136,514	\$ 136,514
Pedro Granadillo	—	99,646	99,646
Peter M. Kash	—	99,646	99,646
Joshua A. Kazam	—	80,963	80,963
Frank Litvack, M.D.	—	136,514	136,514
Paul A. Mieyal, Ph.D.	—	80,963	80,963
Gregory W. Schafer	—	99,646	99,646
David M. Tanen ⁽³⁾	—	80,963	80,963

- (1) Peter M. Strumph, our former Chief Executive Officer, has been omitted from this table since he received no additional compensation for serving on our Board; his compensation is described below under "Compensation of Executive Officers."
- (2) Amounts reflect the grant date fair value of awards granted under the Company's Amended and Restated Stock Option Plan, computed pursuant to Financial Accounting Standards Board's Accounting Standards Codification 718 "*Compensation — Stock Compensation*". Assumptions used in the calculation of these amounts are included in Note 10 of the Notes to Audited Financial Statements included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 3, 2010.
- (3) Mr. Tanen resigned as a director effective as of the appointment of Drs. Beldegrun and Litvack as directors in September 2009.

CORPORATE GOVERNANCE

Process for Identifying and Evaluating Director Nominees

The Board of Directors is responsible for nominating directors for election at annual meetings of stockholders or to fill vacancies on the Board of Directors. The Board of Directors has delegated the selection and nomination process to the Nominating and Corporate Governance Committee, with the expectation that other members of the Board of Directors, and of management, will be requested to take part in the process as appropriate.

Procedures for Re-Nomination of a Current Director

The Nominating and Corporate Governance Committee reviews, at least annually, the performance of each current director and considers the results of such evaluation when determining whether or not to re-nominate such director for an additional term. In addition to reviewing the qualifications outlined in the "Director Qualifications" section below, in determining whether to recommend a director for re-election, the Nominating and Corporate Governance Committee also considers the director's past attendance at meetings and participation in and contributions to the activities of the Board of Directors. As part of this analysis, the Nominating and Corporate Governance Committee will also take into account the nature of and time involved in a director's service on other boards or committees. Following this review, the Nominating and Corporate Governance Committee nominated and recommended that all current members of the Board of Directors be elected to the Board of Directors.

New Candidates

Generally, the Nominating and Corporate Governance Committee identifies candidates for director nominees in consultation with management, through the use of search firms or other advisers, through recommendations submitted by stockholders or through such other methods as the Nominating and Corporate Governance Committee deems to be helpful to identify candidates. Once candidates have been identified, the Nominating and Corporate Governance Committee confirms that the candidates meet all of the minimum qualifications for director nominees established by the Nominating and Corporate Governance Committee. The Nominating and Corporate Governance Committee may gather information about the candidates through interviews, detailed questionnaires regarding experience, background and independence, comprehensive background checks from a qualified company of its choosing, or any other means that the Nominating and Corporate Governance Committee deems to be helpful in the evaluation process.

An initial reviewing member of the Nominating and Corporate Governance Committee will make a preliminary determination regarding whether a potential candidate is qualified to fill a vacancy or satisfy a particular need. If so, the full Nominating and Corporate Governance Committee will make an investigation and interview the potential candidate, as necessary, to make an informed final determination. The Nominating and Corporate Governance Committee will meet as a group to discuss and evaluate the qualities and skills of each candidate, both on an individual basis and taking into account the overall composition and needs of the Board of Directors. The policy of the Nominating and Corporate Governance Committee is that there be no difference in the manner by which it evaluates director nominees, whether nominated by management, by a member of the Board of Directors or by a stockholder. Based on the results of the evaluation process, the Nominating and Corporate Governance Committee recommends candidates for the Board of Director's approval as director nominees for election to the Board of Directors. The Nominating and Corporate Governance Committee also recommends candidates for the Board of Director's appointment to the Committees of the Board of Directors.

Director Qualifications

The Nominating and Corporate Governance Committee is responsible for reviewing with the Board of Directors from time to time the appropriate qualities, skills and characteristics desired of members of the Board of Directors in the context of the needs of the business and current make-up of the Board of Directors. In evaluating the suitability of individual candidates (both new candidates and current members of the Board of Directors), the Nominating and Corporate Governance Committee, in nominating candidates for election, or the Board of Directors, in approving (and, in the case of vacancies, appointing) such candidates, take into account many factors, including:

- personal and professional integrity, ethics and values;
- experience in corporate management, such as serving as an officer or former officer of a publicly-held company, and a general understanding of marketing, finance and other elements relevant to the success of a publicly-traded company in today's business environment;
- experience in the Company's industry and with relevant social policy concerns;
- experience as a board member of another publicly-held company;
- academic expertise in an area of the Company's operations; and
- practical and mature business judgment, including ability to make independent analytical inquiries.

Each candidate nominee must possess fundamental qualities of intelligence, honesty, good judgment, high ethics and standards of integrity, fairness and responsibility. A candidate must also have substantial or significant business or professional experience or an understanding of life sciences, finance, marketing, financial reporting, international business or other disciplines relevant to our business.

The Nominating and Corporate Governance Committee and the Board of Directors evaluate each individual in the context of the Board of Directors as a whole, with the objective of assembling a group that can best perpetuate the success of our business and represent stockholder interests through the exercise of sound judgment using its diversity of experience in these various areas. The Company does not have a diversity policy; however, as summarized above, the Nominating and Corporate Governance Committee seeks to nominate candidates with a diverse range of knowledge, experience, skills, expertise, and other qualities that will contribute to the overall effectiveness of the Board of Directors.

Procedures for Recommendation of Director Nominees by Stockholders

The Nominating and Corporate Governance Committee will consider director candidates who are recommended by our stockholders. Stockholders, in submitting recommendations to the Nominating and Corporate Governance Committee for director candidates, must comply with our Bylaws as well as the procedures established by the Nominating and Corporate Governance Committee, which provide that the person or group submitting the recommendation must provide the Nominating and Corporate Governance Committee with a notice that sets forth:

- all information relating to each nominee that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case, pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended, or the Exchange Act;
- information regarding the relationship between the recommending stockholder or recommending stockholder group and the nominee;
- whether the nominee or any immediate family member of the nominee has, during the year of the nomination or the preceding three fiscal years, accepted directly or indirectly certain consulting, advisory, or other compensatory fees from the recommending stockholder or any member of the group of recommending stockholders or any affiliate of any such holder or member;
- such information as may be reasonably required to determine whether the nominee is qualified to serve on the Audit Committee of the Board of Directors;

- such information as may be reasonably required to determine whether the nominee complies with the standards of independence established by the Nasdaq Stock Market, if applicable;
- each nominee's written consent to being named in a proxy statement as a nominee and to serving as a director if elected;
- the name and address of the recommending stockholder or recommending stockholder group giving the notice (and the beneficial owner, if any, on whose behalf the nomination is made);
- the class and number of shares of our capital stock that are owned beneficially and of record by such recommending stockholder or recommending stockholder group (and such beneficial owner, if applicable);
- a representation that the recommending stockholder or members of the recommending stockholder group are holders of record of our stock entitled to vote at such meeting and intend to appear in person or by proxy at the meeting to propose such nomination; and
- a representation whether the recommending stockholder or recommending stockholder group (or such beneficial owner, if any), intends to solicit proxies from stockholders in support of such nomination.

We may request from the recommending stockholder or recommending stockholder group such other information as may reasonably be required to determine whether each person recommended by a stockholder or stockholder group as a nominee meets the minimum director qualifications established by the Board of Directors and to enable us to make appropriate disclosures to stockholders entitled to vote in the next election of directors. Nominees are required to make themselves reasonably available to be interviewed by the Nominating and Corporate Governance Committee and members of management, as determined appropriate by the Nominating and Corporate Governance Committee. We will not accept a stockholder recommendation for a nominee if the recommended candidate's candidacy or, if elected, Board of Directors membership, would violate applicable state law, federal law or the rules of any exchange or market on which our securities are listed or traded.

Notices should be directed to the attention of the Corporate Secretary, Nile Therapeutics, Inc., 4 West 4th Ave., Suite 400, San Mateo, California 94402.

Code of Business Conduct and Ethics

The Board of Directors has adopted a Code of Business Conduct and Ethics, or the Code, that applies to all directors, officers, employees, consultants, contractors and agents, wherever they are located and whether they work for us on a full- or part-time basis. The Code was designed to help such directors, employees and other agents to resolve ethical issues encountered in the business environment. The Code covers topics such as conflicts of interest, compliance with laws, confidentiality of Company information, encouraging the reporting of any illegal or unethical behavior, fair dealing and use of Company assets.

You can access the Code, as adopted by the Board of Directors, at the Corporate Governance page of our website at www.nilethera.com. Please note that information contained on our website is not incorporated by reference in, or considered to be a part of, this Proxy Statement. We may post amendments to or waivers of the provisions of the Code, if any, made with respect to any directors and employees on that website.

Communications with the Board of Directors

We provide a process for stockholders to send communications to the Board of Directors, the non-management members as a group, or any of the directors individually. Stockholders may contact any of the directors, including the non-management directors, by writing to them c/o the Corporate Secretary, Nile Therapeutics, Inc., 4 West 4th Ave., Suite 400, San Mateo, California 94402. All communications will be compiled by our Corporate Secretary, and submitted to the Board of Directors or the individual directors, as applicable, on a periodic basis.

Communications from our officers or directors and proposals submitted by stockholders to be included in our definitive proxy statement, pursuant to Rule 14a-8 of the Exchange Act (and related communications) will not be viewed as a stockholder communication. Communications from our employees or agents will be viewed as stockholder communications only if such communications are made solely in such employee's or agent's capacity as a stockholder.

INFORMATION CONCERNING THE BOARD OF DIRECTORS AND ITS COMMITTEES

Independence of the Board of Directors

The listing standards of the Nasdaq Stock Market require that a majority of the members of a listed company's board of directors must qualify as "independent," as determined by the board. Our Board of Directors consults with our legal counsel to ensure that the Board's determinations are consistent with all relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in the applicable Nasdaq listing standards. Consistent with these considerations, and after review of all relevant transactions or relationships between each director, or any of his family members, and Nile, its senior management and its independent registered public accounting firm, the Board has determined that Messrs. Granadillo, Kash and Schafer and Drs. Litvack and Mieyal are independent directors within the meaning of the applicable Nasdaq listing standards.

Board Leadership Structure and Risk Management

The Company currently has separate individuals serving as Chairman of the Board and as Chief Executive Officer. The CEO is responsible for setting the strategic direction of the Company and managing the day-to-day leadership and performance of the Company, while the Chairman provides guidance to the CEO, sets the agenda for meetings of the Board of Directors and presides over meetings of the full Board. The Company believes this structure strengthens the role of the Board in fulfilling its oversight responsibility and fiduciary duties to the Company's stockholders while recognizing the day-to-day management direction of the Company by its CEO, Mr. Kazam.

The Board of Directors believes that oversight of the Company's risk management efforts is a key responsibility that is shared by the entire Board. The Board regularly reviews risk management information regarding the Company's liquidity and operations. Board members regularly receive financial statements which are then discussed at the quarterly meetings of the Board. In addition, Mr. Kazam frequently has informal discussions with board members regarding risk management.

Board Committees and Meetings

The Board held nine meetings (either in person or by telephone conference) in 2009 and took action by written consent four times. All directors attended at least 75% of the aggregate meetings of the Board and of the committees on which they served. A director who is unable to attend a meeting is expected to notify the Chairman of the Board of Directors or the Chairman of the appropriate Committee in advance of such meeting, and, whenever possible, participate in such meeting via teleconference. In addition, directors are expected to make reasonable efforts to attend annual meetings of stockholders. Six of our seven directors attended the 2009 Annual Meeting of Stockholders.

The Board of Directors has established three standing committees: the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee. Each Committee of the Board of Directors has a charter that has been assessed and approved by the Board of Directors. Each Committee reviews the appropriateness of its charter at least annually. The charters of these Committees are available on our website at www.nilethera.com. The following table provides membership for each of the Board committees:

<u>Name of Committee</u>	<u>Membership</u>
Audit	Mr. Granadillo, Dr. Mieyal and Mr. Schafer (Chair)
Compensation	Mr. Granadillo (Chair), Mr. Kash and Dr. Mieyal
Nominating and Corporate Governance	Mr. Granadillo and Mr. Kash (Chair)

Audit Committee

The Audit Committee is responsible for, among other duties, reviewing the Company's internal audit and accounting processes, reviewing the results and scope of the audit and other services provided by the Company's independent registered public accounting firm and reviewing and discussing audited financial statements, management's assessment of internal control over financial reporting under Section 404 of the Sarbanes Oxley Act of 2002 and other accounting matters with the management of the Company. The Audit Committee is established in accordance with section 3(a)(58)(A) of the Exchange Act. The responsibilities of the Audit Committee include:

- meeting with our management periodically to consider management's analysis of the adequacy of our internal controls and the objectivity of our financial reporting;
- appointing the independent registered public accounting firm, determining the compensation of the independent registered public accounting firm and pre-approving the engagement of the independent registered public accounting firm for audit and non-audit services;
- overseeing the independent registered public accounting firm, including reviewing independence and quality control procedures and experience and qualifications of audit personnel that are providing audit services;
- meeting with the independent registered public accounting firm and reviewing the scope and significant findings of the audits performed by them, and meeting with management and internal financial personnel regarding these matters;
- reviewing our financing plans, management's analysis of the adequacy and sufficiency of financial and accounting controls, practices and procedures, the activities and recommendations of the auditors and our reporting policies and practices, and reporting recommendations to the full Board of Directors for approval;
- establishing procedures for the receipt, retention and treatment of complaints regarding internal accounting controls or auditing matters and the confidential, anonymous submissions by employees of concerns regarding questionable accounting or auditing matters; and
- preparing the reports required by the SEC rules to be included in our annual proxy statement.

The Audit Committee held four meetings (either in person or by telephone conference) in 2009 and took action by written consent once. The charter of the Audit Committee is available on the internet at http://www.nilethera.com/inv_corp_gov.html.

Our Board of Directors has reviewed the definition of independence for Audit Committee members and has determined that each member of our Audit Committee is independent (as independence is currently defined in the applicable Nasdaq listing standards). The Board has further determined that Mr. Schafer qualifies as an "audit committee financial expert," as defined by applicable rules of the Securities and Exchange Commission.

Compensation Committee

The purpose of the Compensation Committee is to review and make recommendations to the Board of Directors regarding all forms of compensation to be provided to the executive officers and employees of the Company. The Compensation Committee's policy is to ensure that senior management will be accountable to the Board of Directors through the effective application of compensation policies applicable to the Company's executive officers, including performance goals and stock and incentive compensation. In addition, the Compensation Committee strives to attract and retain key management talent, to support the achievement of the Company's business strategies through the establishment of appropriate compensation components, to ensure the integrity of the Company's compensation and benefit practices, and to safeguard the interests of the Company's stockholders. The Compensation Committee is responsible for, among other duties, reviewing and approving the compensation arrangements for the Company's senior management and any compensation plans in which the executive officers and directors are eligible to participate, and acting as administrator of the Company's stock option plans, employee stock purchase plan and such other equity participation plans as may

be adopted by the Board of Directors. The Compensation Committee's role includes coordination and cooperation with other Board committees, management, external auditors, counsel and other committee advisors. The responsibilities of the Compensation Committee include:

- designing and approving (in consultation with management and the Board of Directors) overall employee compensation policies and recommending to the Board of Directors major compensation programs; and
- reviewing and approving the compensation of our Chief Executive Officer and other corporate officers, including salary, bonus and equity awards.

All current members of the Compensation Committee are independent (as independence is currently defined in the applicable Nasdaq listing standards). The Compensation Committee held two meetings (either in person or by telephone conference) in 2009. The charter of the Compensation Committee is available on the internet at http://www.nilethera.com/inv_corp_gov.html.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee is responsible for, among other duties, identifying appropriate candidates for nomination to membership on the Board of Directors. The Nominating and Corporate Governance Committee is also responsible for reviewing director nominees recommended by stockholders of the Company. The procedures for making such a recommendation are described in the Company's bylaws and above in the section entitled "Corporate Governance — Procedures for Recommendation of Director Nominees by Stockholders." The responsibilities of the Nominating and Corporate Governance Committee include:

- selecting or recommending qualified candidates for election to the Board of Directors and appointment to the Committees of the Board of Directors;
- evaluating and reviewing the performance of existing directors;
- making recommendations to the Board of Directors regarding governance matters, including our Certificate of Incorporation, Bylaws and Charters of the Committees of the Board of Directors; and
- developing and recommending to the Board of Directors applicable governance and nominating guidelines.

All current members of the Nominating and Corporate Governance Committee are independent (as independence is currently defined in the applicable Nasdaq listing standards). The Nominating and Corporate Governance Committee met once in 2009. The charter of the Nominating and Corporate Governance Committee is available on the internet at http://www.nilethera.com/inv_corp_gov.html.

Compensation Committee Interlocks and Insider Participation

No member of the Compensation Committee has at any time served as an officer or been otherwise employed by us. None of our executive officers currently serves, or in the past year has served, as a member of the Board of Directors or Compensation Committee of any other entity that has executive officers who have served on our Board of Directors or Compensation Committee. As required by SEC regulation, Mr. Kash's relationship with Riverbank Capital Securities, Inc. is disclosed under "Transactions with Related Persons."

EXECUTIVE OFFICERS OF THE COMPANY

The executive officers of the Company and their ages as of the date of the Annual Meeting are as follows:

<u>Name</u>	<u>Age</u>	<u>Position</u>	<u>Executive Officer Since</u>
Joshua A. Kazam	33	President and Chief Executive Officer	June 2009
Daron Evans	36	Chief Financial Officer	February 2007
Hsiao Lieu	39	Vice President, Clinical Research	March 2008

Joshua A. Kazam has served as our non-employee President and Chief Executive Officer since June 2009. See his biography set forth above in the section entitled “Director Nominees.”

Daron Evans has been our Chief Financial Officer since September 2007 and was our Chief Operating Officer from February 2007 to September 2007. Mr. Evans has over fifteen years of professional experience in drug development financial analysis and fiscal control. From 2006 to 2007, Mr. Evans served as Director of Business Assessment at Vistakon, a Johnson & Johnson company, where he led efforts to improve R&D efficiency and speed to market. From 2004 to 2006, he was a Director of Portfolio & Business Analytics for Scios R&D, a Johnson & Johnson company, where he was responsible for financial controls and reporting for portfolio of six clinical stage programs and five preclinical stage programs. While at Scios, Mr. Evans also served as Project Manager for the European Registration Trial of Nesiritide. Mr. Evans also has experience as co-founder of a biotechnology diagnostic company, and has worked as a Management Consultant in the pharmaceutical industry with Booz Allen Hamilton. Mr. Evans received his M.B.A. from The Fuqua School of Business at Duke University, his M.S. in Biomedical Engineering from Southwestern Medical School and University of Texas at Arlington and his B.S. in Chemical Engineering from Rice University.

Hsiao D. Lieu, M.D., F.A.C.C. has been the Company’s Vice President of Clinical Research since March 2008. Dr. Lieu has over 13 years of experience in the biopharmaceutical/biotech industry including academic medicine (cardiology), molecular cardiology research, translational and clinical drug development including execution of large multinational Phase III clinical trials and responsibility for interactions with regulatory authorities and key opinion leaders in the U.S., Canada, and Europe. From 2006 to 2008, Dr. Lieu was Director of Clinical Development for Portola Pharmaceuticals, Inc. From 2003 to 2006 Dr. Lieu worked at CV Therapeutics, Inc., where he served as Director, Clinical Research and Development. Dr. Lieu also worked as a researcher at the J. David Gladstone Institute of Cardiovascular Disease at the University of California at San Francisco (“UCSF”) from 2001 to 2003 where he conducted molecular cardiology research. Dr. Lieu currently serves as an Adjunct Assistant Clinical Professor of Medicine, Cardiology Division at UCSF. Dr. Lieu completed his clinical cardiology fellowship at UCSF and his residency in internal medicine at Columbia University. He received his M.D. from the Albert Einstein College of Medicine with distinction in molecular biology research, and his B.A. from New York University. Dr. Lieu is a Fellow of the American College of Cardiology.

COMPENSATION OF EXECUTIVE OFFICERS

Summary Compensation Table

The following summary compensation table reflects cash and non-cash compensation for the 2008 and 2009 fiscal years awarded to or earned by (i) each individual serving as our principal executive officer during the fiscal year ended December 31, 2009; and (ii) each individual that served as an executive officer at the end of the fiscal year ended December 31, 2009 and who received in excess of \$100,000 in total compensation during such fiscal year. We refer to these individuals as our "named executive officers."

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Option Awards (\$) ⁽¹⁾	All Other Compensation (\$)	Total (\$)
Joshua Kazam ⁽²⁾ <i>CEO, Director</i>	2009	—	—	80,963	—	80,963
Peter M. Strumph ⁽³⁾ <i>Former CEO, Director</i>	2009	143,559	—	54,774	250,404 ⁽⁴⁾	448,737
	2008	316,329	—	—	1,210 ⁽⁵⁾	317,539
Daron Evans <i>Chief Financial Officer</i>	2009	200,000	20,000 ⁽⁶⁾	80,034	530 ⁽⁵⁾	300,564
	2008	175,000	—	—	530 ⁽⁵⁾	175,530
Hsiao Lieu ⁽⁷⁾⁽⁸⁾ <i>VP, Clinical Development</i>	2009	187,504	30,750 ⁽⁹⁾	130,394	—	348,648
	2008	202,724	55,685 ⁽¹⁰⁾	1,011,300	—	1,269,709

- (1) Amounts reflect the grant date fair value of awards granted under the Company's Amended and Restated Stock Option Plan, computed pursuant to Financial Accounting Standards Board's Accounting Standards Codification 718 "Compensation — Stock Compensation". Assumptions used in the calculation of these amounts are included in Note 10 of the Notes to Audited Financial Statements included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 3, 2010. For awards that are subject to performance conditions, amounts reflect the assumption that the highest level of performance conditions will be achieved. See the "Outstanding Equity Awards at Fiscal Year-End" table in this proxy statement for information regarding all option awards outstanding as of December 31, 2009.
- (2) Mr. Kazam was appointed President and CEO on June 11, 2009. Mr. Kazam, who also serves as a director, does not receive additional compensation for his service as President and CEO.
- (3) Mr. Strumph's employment with Nile terminated on June 10, 2009, on which date Mr. Strumph also resigned as a director.
- (4) Consists of (i) \$230,000 in severance benefits, (ii) \$19,194 in vacation accrual payout, and (iii) a life insurance premium of \$1,210.
- (5) Represents premiums paid for life insurance.
- (6) Represents a performance bonus for the period from January 1, 2009 to December 31, 2009, pursuant to the terms of Mr. Evans' employment agreement, which was paid in January 2010.
- (7) Effective July 7, 2009, Dr. Lieu transitioned to part-time (50%) employment, which reduced his base salary to \$125,000.
- (8) Dr. Lieu joined the Company in March 2008.
- (9) Consists of (i) a retention bonus of \$12,000 in connection with Dr. Lieu's transition to part-time employment, and (ii) a performance bonus in the amount of \$18,750 for the period from January 1, 2009 to December 31, 2009, which was paid in January 2010.
- (10) Consists of (i) a performance bonus in the amount of \$13,685 for the period from March 10, 2008 to December 31, 2008 and (ii) a signing bonus of \$42,000.

Employment Agreements and Post-Termination Benefits

Peter M. Strumph — Former Chief Executive Officer

Mr. Strumph's employment with us was governed by an employment agreement dated May 11, 2007, as amended on March 4, 2008 and March 10, 2009, respectively. The employment agreement provided for Mr. Strumph's employment as Chief Executive Officer for a three-year term commencing on June 4, 2007, unless terminated earlier. The agreement provided for an initial annual base salary of \$310,000, which amount was to be reviewed by the Board on an annual basis and never decreased. Effective as of January 1, 2009, Mr. Strumph's annual base salary was increased to \$320,000. Under the agreement, Mr. Strumph was entitled to an annual performance bonus of up to \$150,000 upon the successful completion of annual corporate and individual milestones. Mr. Strumph was also entitled to a bonus upon a "change of control," the amount of which varied from \$50,000 to \$200,000 depending on the valuation ascribed to the Company at the time of the change of control. The agreement also provided for the awarding of certain stock options to Mr. Strumph, referred to as Employment Options, Performance Options, and Technology Options.

Mr. Strumph's employment with us terminated on June 10, 2009, pursuant to the terms of a separation agreement and release executed on such date. The separation agreement provides for a lump sum payment to Mr. Strumph in the amount of \$230,000, and for us to continue providing for Mr. Strumph's participation in our health and dental plans for a period of six months. The separation agreement also provides that Mr. Strumph is entitled to a payment of \$100,000 if, within 24 months following the separation date, we complete a transaction resulting in a change of control. We further agreed to accelerate the vesting of the remaining unvested installment of Mr. Strumph's Employment Options relating to 329,857 shares of our common stock. The separation agreement also provides that all vested stock options held by Mr. Strumph as of the separation date will remain exercisable for a period of five years following the separation date. As of the separation date, after taking into account the acceleration of vesting discussed above, Mr. Strumph held vested Employment Options representing the right to purchase 989,572 shares of our common stock and vested Performance Options representing the right to purchase 242,482 shares of our common stock, in both cases at an exercise price of \$2.71 per share. In addition, Mr. Strumph held a vested stock option to purchase 149,148 shares of our common stock at an exercise price of \$0.88 per share, which was granted in January 2009 and subsequently exercised.

The term "change of control" under both the employment and separation agreements means any of the following: (A) a private transaction (or series of related private transactions) leading to a merger, acquisition, consolidation, or sale of substantially all of the assets of the Company; (B) any transaction resulting in a single party (or group of affiliated parties) acquiring or holding capital stock of the Company representing a majority of the Company's outstanding voting power; or (C) the disposition by us of all or substantially all of our business and/or assets in one transaction or series of related transactions (other than a merger effected exclusively for the purpose of changing our state of domicile). Notwithstanding the forgoing, neither of the following shall be considered a change of control: (i) if the stockholders prior to such transaction(s) continue to hold more than 50% of the securities or assets of the surviving or resulting company; or (ii) a private placement of our equity securities in connection with the financing of our on-going operations.

Daron Evans — Chief Financial Officer

Mr. Evans' employment with us was initially governed by an employment agreement dated January 19, 2007, as amended on August 19, 2007 and March 4, 2008, respectively. The employment agreement, which initially provided for Mr. Evans's employment as Chief Operating Officer of our predecessor entity, a privately-held Delaware corporation, or Old Nile, provides for a term that expired on February 13, 2010. Despite the expiration of the employment agreement, Mr. Evans employment with us continues on an indefinite basis on substantially the same compensation terms. Under his former employment agreement, Mr. Evans was initially entitled to an annual base salary of \$175,000. As of January 1, 2009, his annual base salary was increased to \$200,000. In addition, Mr. Evans is eligible to receive an annual performance bonus of up to \$60,000 upon the successful completion of annual corporate and individual milestones.

Mr. Evans' former employment agreement also provided for the awarding of certain stock options, referred to as Employment Options, Performance Options, and Technology Options. On September 17, 2007, Mr. Evans was granted Employment Options to purchase 239,896 shares of our common stock at an exercise

price of \$2.71, vesting in three equal installments on the day before each anniversary of his employment agreement. Mr. Evans was also granted Performance Options to purchase 288,458 shares of our common stock at an exercise price of \$2.71, vesting up to one-third in each calendar year, or a pro-rata portion thereof for a period less than a full year, based on the successful completion of annual corporate and individual milestones as determined by our Board of Directors or its Compensation Committee. To the extent our Board or Compensation Committee declines to vest the maximum amount of Performance Options in any given calendar year, or a pro-rata portion thereof for a period less than a full year, such unvested amount are deemed forfeited by Mr. Evans. On March 4, 2008, the Compensation Committee determined that, for the pro-rated period ending December 31, 2007, Mr. Evans' Performance Options would vest in the amount of 76,528 shares out of a possible 84,562 shares, resulting in the forfeiture of Performance Options to purchase 8,034 shares. On January 16, 2009, the Compensation Committee determined that, for the calendar year ending December 31, 2008, Mr. Evans' Performance Options would vest in the amount of 43,269 shares out of a possible 96,153 shares, resulting in the forfeiture of Performance Options to purchase 52,884 shares. On January 19, 2010, the Compensation Committee determined that, for the calendar year ending December 31, 2009, Mr. Evans' Performance Options would vest in the amount of 50,000 shares out of a possible 96,153 shares, resulting in the forfeiture of Performance Options to purchase 46,153 shares.

Hsiao Lieu, M.D., F.A.C.C. — Vice President, Clinical Research

Dr. Lieu's employment with us is governed by an offer letter dated February 22, 2008, as amended on March 10, 2009. The offer letter provides for Dr. Lieu's employment as our Vice President, Clinical Research as of March 10, 2008, on an at-will basis. Under the offer letter, Dr. Lieu is entitled to an annual base salary of \$250,000, which was reduced by 50% to \$125,000 effective July 7, 2009 in connection with Dr. Lieu's transition to part-time (50%) employment. In addition, Dr. Lieu is eligible to receive an annual performance bonus of up to 30% of his base salary upon the successful completion of annual corporate and individual milestones. Pursuant to the offer letter, Dr. Lieu also received a signing bonus of \$42,000.

The offer letter also provides for the awarding of certain stock options to Dr. Lieu, referred to as Employment Options, Performance Options, and Technology Options. On March 10, 2008, Dr. Lieu was granted Employment Options to purchase 200,000 shares of our common stock at an exercise price of \$4.45, with one-fourth vesting after one year and the remainder vesting in 36 equal monthly installments thereafter. Dr. Lieu was also granted Performance Options to purchase 100,000 shares of our common stock at an exercise price of \$4.45, vesting up to one-fourth in each calendar year, or a pro-rata portion thereof for a period less than a full year, based on the successful completion of annual corporate and individual milestones as determined by our Board of Directors or its Compensation Committee. To the extent our Board or Compensation Committee declines to vest the maximum amount of Performance Options in any given calendar year, or a pro-rata portion thereof for a period less than a full year, such unvested amount are deemed forfeited by Dr. Lieu. On January 16, 2009, the Board determined that, for the pro-rated period ending December 31, 2008, Dr. Lieu's Performance Options would vest in the amount of 9,123 shares out of a possible 20,274 shares, resulting in the forfeiture of Performance Options to purchase 11,151 shares. On January 19, 2010, the Board determined that, for the calendar year ending December 31, 2009, Dr. Lieu's Performance Options would vest in the amount of 12,500 shares out of a possible 25,000 shares, resulting in the forfeiture of Performance Options to purchase 12,500 shares. In the event that we acquire by license, acquisition or otherwise, an additional product for development that is first identified by Dr. Lieu, he will receive Technology Options to purchase 50,000 shares of our common stock if the product is in pre-clinical development or 75,000 shares if the product is in human clinical trials.

Pursuant to the July 7, 2009 amendment to his offer letter, Dr. Lieu became entitled to a retention bonus of up to \$48,000 and a 10-year option to purchase up to 150,000 shares of the Company's common stock at an exercise price of \$1.14 per share, with the retention bonus becoming payable and the option award vesting in three installments based on the completion of specified clinical development milestones relating to the Phase IIa clinical trial of the Company's CD-NP product candidate.

Dr. Lieu's offer letter provides that, immediately following a "change in control," all Employment Options and any subsequently granted options that vest over a period of time, and not based on performance, shall immediately vest and shall become exercisable immediately and shall remain exercisable for a period equal to the lesser of five years from the date of the change of control or ten years from the date of grant of

such options. If within the twelve-month period following a change in control, Dr. Lieu experiences a “covered termination” or a “constructive termination,” and if, within 60 days of such covered termination or constructive termination, Dr. Lieu executes and does not revoke during any applicable revocation period a general release of all claims against the Company and our affiliates in a form acceptable to us, then, as a severance benefit, he shall be entitled to (i) six months of his base salary then in effect, payable in full within 30 days of his last day of employment; (ii) immediate vesting of all Performance Options (including the initial Performance Options and any subsequently granted performance-based stock options), to the extent that the shares subject to such options have not been terminated or forfeited pursuant to the option agreements, which shall become exercisable immediately and shall remain exercisable for a period equal to the lesser of five years from the date of Dr. Lieu’s covered termination or constructive termination or ten years from the date of grant of such Performance Options; and (iii) a prorated portion of his maximum annual performance bonus.

The term “change of control” under the offer letter means a transaction or series of transactions (other than an offering of the Company’s stock to the general public through a registration statement filed with the Securities and Exchange Commission) resulting in a single party (or group of affiliated parties) acquiring or holding capital stock of the Company representing a majority of the Company’s outstanding voting power. Notwithstanding the forgoing, neither of the following shall be considered a change of control: (i) if the stockholders prior to such transaction(s) continue to hold more than 50% of the securities or assets of the surviving or resulting company; or (ii) a private placement of our equity securities in connection with the financing of our on-going operations.

The term “covered termination” means the termination of Dr. Lieu’s employment by the Company other than for “cause,” which constitutes a “separation from service” within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the “Code”), and the Department of Treasury regulations and other guidance promulgated thereunder. The term “cause” means the following conduct or actions taken by Dr. Lieu: (i) gross negligence or willful misconduct in the performance of his duties to the Company; (ii) repeated unexplained or unjustified absence from the Company; (iii) a material and willful violation of any federal or state law; (iv) commission of any act of fraud with respect to the Company; (v) conviction of a felony or a crime involving moral turpitude causing material harm to the standing and reputation of the Company; or (vi) a material failure to perform his duties or to follow the instructions of our Chief Executive Officer, in each case as determined in good faith by our Chief Executive Officer.

The term “constructive termination” means Dr. Lieu’s resignation which constitutes a “separation from service” within the meaning of Section 409A of the Code and the Department of Treasury regulations and other guidance promulgated thereunder within 90 days of the first to occur of one or more of the following events which remains uncured 30 days after Dr. Lieu’s delivery to the Company of written notice thereof: (i) any change in Dr. Lieu’s position with the Company that diminishes in any material respect the duties and responsibilities of his position as in effect immediately preceding such action; provided, however, that a reduction in duties, level of responsibilities or the requirements of his position solely by virtue of the Company being acquired and made part of a larger entity shall not by itself constitute grounds for a constructive termination; (ii) any material reduction by the Company in Dr. Lieu’s base salary or in the percentage of his annual bonus opportunity as a percentage of his base salary; or (iii) the Company’s relocation of our principal office to a place more than a material distance from our present headquarters (except that required travel on the Company’s business to an extent substantially consistent with Dr. Lieu’s present business travel obligations shall not be considered a relocation).

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information concerning stock options held by the named executive officers at December 31, 2009:

Name	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options	Option Exercise Price (\$)	Option Expiration Date
Joshua Kazam	—	25,000	—	0.93	12/23/2018 ⁽¹⁾
	—	65,000	—	1.77	7/21/2019 ⁽¹⁾
	33,333	16,667	—	4.50	1/25/2018 ⁽¹⁾
Peter M. Strumph	989,572	—	—	2.71	6/10/2015 ⁽²⁾
	242,482	—	—	2.71	6/10/2015 ⁽³⁾
Daron Evans	49,020	—	—	0.88	1/16/2019 ⁽⁴⁾
	25,000	—	75,000	0.89	6/24/2019 ⁽⁵⁾
	159,933	79,966	—	2.71	9/14/2017 ⁽⁶⁾
	119,797	—	107,743	2.71	9/14/2017 ⁽⁷⁾
Hsiao Lieu	31,103	—	—	0.88	1/16/2019 ⁽⁸⁾
	37,500	—	112,500	1.14	6/24/2019 ⁽⁹⁾
	87,503	112,497	—	4.45	3/10/2018 ⁽¹⁰⁾
	9,123	—	79,726	4.45	3/10/2018 ⁽¹¹⁾

(1) Mr. Kazam's options were granted as compensation for his service as a director.

(2) Options were scheduled to vest in equal amounts annually over three years, commencing on May 15, 2008. The first two annual installments vested on May 15, 2008 and May 15, 2009, respectively, and the final installment vested on June 10, 2009, pursuant to the terms of Mr. Strumph's separation agreement.

(3) Options with respect to 886,919 shares were scheduled to vest, subject to milestone achievements determined by the Board, up to a maximum of one third in each calendar year, or a pro rata portion thereof for a period less than a full year. On March 4, 2008, the Board determined that options for the prorated period ending December 31, 2007 would vest in the amount of 139,008 shares, with options in the amount of 29,466 shares consequently being forfeited. On January 16, 2009, the Board determined that options for the 2008 calendar year would vest in the amount of 103,474 shares, with options in the amount of 192,166 shares consequently being forfeited. The remainder of the options were forfeited on June 10, 2009, as a result of the termination of Mr. Strumph's employment.

(4) Options were granted in exchange for 2008 accrued performance cash bonuses.

(5) Options with respect to 25,000 shares vested immediately upon grant. Options with respect to 75,000 shares are subject to milestone achievements determined by the Board.

(6) Options vest in equal amounts annually over three years, commencing on January 18, 2008.

(7) Options with respect to 288,458 shares vest, subject to milestone achievements determined by the Board, up to a maximum of one third in each calendar year, or a pro rata portion thereof for a period less than a full year. On March 4, 2008, the Board determined that options for the prorated period ending December 31, 2007 would vest in the amount of 76,528 shares out of a possible 84,562 shares, with options in the amount of 8,034 shares consequently being forfeited. On January 16, 2009, the Board determined that options for the 2008 calendar year would vest in the amount of 43,269 shares out of a possible 96,153 shares, with options in the amount of 52,884 shares consequently being forfeited. On January 19, 2010, the Board determined that options for the 2009 calendar year would vest in the amount of 50,000 shares out of a possible 96,153 shares, with options in the amount of 46,153 shares consequently being forfeited.

- (8) Options were granted in exchange for 2008 accrued performance cash bonuses.
- (9) Options with respect to 37,500 shares vested immediately upon grant. Options with respect to 112,500 shares are subject to milestone achievements determined by the Board.
- (10) Options vested in the amount of 50,000 shares on March 10, 2009; the remainder vest in 36 monthly installments of 4,167 shares, commencing on April 10, 2009.
- (11) Options with respect to 100,000 shares vest, subject to milestone achievements determined by the Board, up to a maximum of one fourth in each calendar year, or a pro rata portion thereof for a period less than a full year. On January 16, 2009, the Board determined that options for the prorated period ending December 31, 2008 would vest in the amount of 9,123 shares out of a possible 20,274 shares, with options in the amount of 11,151 shares consequently being forfeited. On January 19, 2010, the Board determined that options for the 2009 calendar year would vest in the amount of 12,500 shares out of a possible 25,000 shares, with options in the amount of 12,500 shares consequently being forfeited.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information known to us regarding the beneficial ownership of our common stock as of June 10, 2010 by:

- each of our directors,
- each named executive officer as defined and named in the Summary Compensation Table appearing herein,
- all of our directors and named executive officers as a group, and,
- each person known by us to beneficially own more than five percent of our common stock (based on information supplied in Schedules 13D and 13G filed with the Securities and Exchange Commission).

Except as indicated by footnote, and subject to applicable community property laws, each person identified in the table possesses sole voting and investment power with respect to all capital stock shown to be held by that person. The address of each named executive officer and director, unless indicated otherwise, is c/o Nile Therapeutics, Inc., 4 West 4th Ave., Suite 400, San Mateo, California 94402.

Name of Beneficial Owner	Shares of Common Stock Beneficially Owned (#)	Percentage of Common Stock Beneficially Owned (%) ⁽¹⁾
Directors and Named Executive Officers		
Arie Beldegrun ⁽²⁾	1,315,630	3.74%
Daron Evans ⁽³⁾	553,920	1.58%
Pedro Granadillo ⁽⁴⁾	182,588	*
Peter M. Kash ⁽⁵⁾ 689 Fifth Avenue, 12th Floor New York, NY 10022	2,638,193	7.55%
Joshua A. Kazam ⁽⁶⁾ 689 Fifth Avenue, 12th Floor New York, NY 10022	2,640,740	7.56%
Hsiao Lieu ⁽⁷⁾	274,910	*
Frank Litvack ⁽⁸⁾	400,000	1.15%
Paul Micyal c/o Wexford Capital LP 411 West Putnam Avenue Greenwich, CT 06830	—	—
Gregory W. Schafer ⁽⁹⁾	155,100	*
Peter M. Strumph ⁽¹⁰⁾	1,240,034	3.46%
Directors and executive officers as a group, 10 individuals	9,401,115	24.44%
5% Stockholders		
David M. Tanen ⁽¹¹⁾ 689 Fifth Avenue, 12th Floor New York, NY 10022	1,830,296	5.27%
Wexford Capital LP ⁽¹²⁾ 411 West Putnam Avenue Greenwich, CT 06830	2,746,952	7.92%

* Represents less than 1%.

(1) Assumes 34,560,824 shares of our common stock are outstanding. Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act, and includes any shares as to which the security or stockholder has sole or shared voting power or investment power, and also any shares which the security

or stockholder has the right to acquire within 60 days of June 10, 2010, whether through the exercise or conversion of any stock option, convertible security, warrant or other right. The indication herein that shares are beneficially owned is not an admission on the part of the security or stockholder that he, she or it is a direct or indirect beneficial owner of those shares.

- (2) Consists of (i) 76,935 shares and warrants to purchase an additional 4,210 shares held by Leumi Overseas Trust Corp. Ltd. as Trustee of the BTL Trust, (ii) 64,800 shares and warrants to purchase an additional 64,800 shares held by the Belldegrün Family Trust, (iii) 243,200 shares and warrants to purchase an additional 243,200 shares held by the Arie S. Belldegrün M.D. Inc. Profit Sharing Plan, (iv) 292,000 shares and warrants to purchase an additional 292,000 shares held by Leumi Overseas Trust Corp. Ltd. as Trustee of the Tampere Trust, and (v) 34,485 shares held by Belco Capital, LLC. Dr. Belldegrün disclaims beneficial ownership of the shares and warrants held by Leumi Overseas Trust Corp. Ltd. as Trustee of each of the BTL Trust and the Tampere Trust, except to the extent of his beneficiary interest therein.
- (3) Includes (i) 526,216 shares issuable upon the exercise of stock options, (ii) 3,952 shares issuable upon the exercise of warrants, (iii) 10,200 shares held by Mr. Evans' wife, and (iv) 400 shares held by Mr. Evans' wife as custodian for the benefit of their minor children under the UGMA.
- (4) Includes 155,000 shares issuable upon the exercise of stock options.
- (5) Includes (i) 155,000 shares issuable upon the exercise of stock options, (ii) 224,866 shares issuable upon the exercise of warrants, and (iii) 165,530 shares held by the Kash Family Foundation. Also includes 496,589 shares held by Mr. Kash's wife as custodian for the benefit of their minor children under the UGMA, to which Mr. Kash disclaims beneficial ownership except to the extent of his pecuniary interest therein.
- (6) Includes (i) 123,333 shares issuable upon the exercise of stock options, (ii) 244,278 shares issuable upon the exercise of warrants, (iii) 613,841 shares held by the Kazam Family Trust, and (iv) 165,530 shares held by the Kash Family Foundation. Also includes 165,530 shares held by Mr. Kazam's wife as custodian for the benefit of their minor daughter under the UGMA, to which Mr. Kazam disclaims beneficial ownership except to the extent of his pecuniary interest therein. Mr. Kazam is the trustee and controls the right to vote and dispose of, but has no pecuniary interest in, the shares held by the Kash Family Foundation.
- (7) Includes 274,810 shares issuable upon the exercise of stock options.
- (8) Consists of 200,000 shares and warrants to purchase an additional 200,000 shares held by Calmedica Capital L.P., a limited partnership of which Dr. Litvack is a limited partner. Dr. Litvack disclaims beneficial ownership of these shares and warrants except to the extent of his pecuniary interest therein.
- (9) Includes 155,000 shares issuable upon the exercise of stock options.
- (10) Includes 1,232,054 shares issuable upon the exercise of stock options and 400 shares held by Mr. Strumph's wife as custodian for the benefit of their minor children under the Uniform Gift to Minors Act (UGMA).
- (11) Includes 140,000 shares issuable upon the exercise of stock options and 31,650 shares issuable upon the exercise of warrants. Also includes 137,941 shares held by Mr. Tanen's wife as custodian for the benefit of their minor daughter under the UGMA, to which Mr. Tanen disclaims beneficial ownership except to the extent of his pecuniary interest therein. Mr. Tanen was a director of the Company from its inception until September 2009.
- (12) Includes (i) 1,910,103 shares held by Iota Investors LLC, a Delaware limited liability company ("Iota Investors"), (ii) five year warrants to purchase 16,841 shares at an exercise price of \$2.71 per share held by Iota Investors, and (iii) 696,675 shares held by Wexford Spectrum Investors LLC, a Delaware limited liability company ("Wexford Spectrum"). Wexford Capital LP, a Delaware limited partnership ("Wexford Capital"), is a registered Investment Advisor and also serves as an investment advisor or sub-advisor to the members of Iota Investors and Wexford Spectrum. Wexford GP LLC, a Delaware limited liability company ("Wexford GP"), is the general partner of Wexford Capital. Mr. Charles E. Davidson is chairman, a managing member and a controlling member of Wexford GP and Mr. Joseph M. Jacobs is president, a managing member and a controlling member of Wexford GP. Beneficial ownership also includes 123,333 shares issuable upon the exercise of stock options that have been assigned to Wexford Capital by Mr. Mיעאל, a director of Nile and vice president of Wexford Capital.

PROPOSAL NO. 2:

RATIFICATION AND APPROVAL OF AN AMENDMENT TO THE AMENDED AND RESTATED 2005 STOCK OPTION PLAN

On June 14, 2010, our Board of Directors adopted, subject to stockholder approval, an amendment to the Amended and Restated 2005 Stock Option Plan (the "Plan") to increase the total number of shares of our common stock subject to the Plan from 5,517,676 to 9,500,000 shares. Our stockholders are being asked to approve this proposed amendment at the annual meeting.

Set forth below is a summary of the Plan, including the proposed amendment, and a discussion of the federal income tax consequences of the issuance and exercise of awards under the Plan to recipients and to us. This summary is qualified in its entirety by reference to the complete text of the Plan in its proposed amended form, a copy of which is attached to this Proxy Statement as *Appendix A*.

General

The purpose of the Plan is to increase stockholder value and to advance the interests of the Company by furnishing a variety of economic incentives ("Incentives") designed to attract, retain and motivate employees and directors of and consultants to the Company. The Board of Directors believes that the proposed amendment to the Plan is necessary to allow the Company to continue to pursue these objectives.

The Plan provides that a committee (the "Committee") composed of at least two disinterested members of the Board of Directors of the Company may grant Incentives in the following forms: (a) stock options; (b) stock appreciation rights ("SARs"); (c) stock awards; (d) restricted stock; (e) performance shares; and (f) cash awards. Incentives may be granted to employees, directors, consultants, advisors or other independent contractors who provide services to the Company (including members of the Company's scientific advisory board) as selected from time to time by the Committee. In the event there is no Committee, then the entire Board shall have responsibility for administering the Plan.

The Plan currently authorizes a total of 5,517,676 shares of common stock for issuance. As of the record date for the annual meeting, we have outstanding under the Plan stock options representing the right to purchase an aggregate of 4,307,749 shares of our common stock at a weighted average exercise price of \$2.10 and an average remaining life of 5.8 years. In addition to the shares reserved for issuance pursuant to the outstanding stock options, we have already issued an additional 240,025 shares of common stock under the Plan pursuant to exercises of stock options. Shares of common stock that are issued under the Plan or that are subject to outstanding Incentives are applied to reduce the maximum number of shares of common stock remaining available for issuance under the Plan. Accordingly, as of the record date for the annual meeting, we may not issue Incentives relating to more than 969,902 shares of common stock unless the proposed amendment to the Plan is approved. As discussed below under the caption "Proposed Amendment to Plan," the proposed amendment would increase the number of shares of common stock authorized for issuance under the Plan from 5,517,676 to 9,500,000, thereby increasing the number of shares remaining available for issuance under the Plan from 969,902 to 4,952,226.

As with many smaller publicly-held companies, particularly companies in the biopharmaceutical sector, equity-based compensation is a significant component of the total package of compensation and benefits that we offer our employees. In order to remain competitive with other biopharmaceutical companies as we seek to recruit new employees, including any new members of our senior management, that we hire and to retain and motivate our current employees, we believe it is imperative that we be able to award stock options and other forms of stock-based compensation. Without the proposed amendment to the Plan, we believe our ability to not only recruit new employees, including potential members of our senior management, to our company, but to retain our current employees, will be severely impaired.

Types of Incentives

Stock Options

Under the Plan, the Committee may grant non-qualified and incentive stock options to eligible participants to purchase shares of common stock from the Company. The Plan confers on the Committee discretion, with respect to any such stock option, to determine the number and purchase price of the shares subject to the option, the term of each option and the time or times during its term when the option becomes exercisable. The purchase price for incentive stock options may not be less than the fair market value of the shares subject to the option on the date of grant. The number of shares subject to an option will be reduced proportionately to the extent that the optionee exercises a related SAR. The term of a non-qualified option may not exceed 10 years and one day from the date of grant and the term of an incentive stock option may not exceed 10 years from the date of grant. Unless otherwise provided by the Committee, any option shall become immediately exercisable in the event of specified changes in corporate ownership or control. The Committee may accelerate the exercisability of any option.

The option price may be paid in cash, check, bank draft or, at the discretion of the Committee, by delivery of shares of common stock valued at their fair market value at the time of purchase or by withholding from the shares issuable upon exercise of the option shares of common stock valued at their fair market value.

In the event that an optionee ceases to be an employee of or consultant to the Company, or the optionee's other service with the Company is terminated, for any reason, including death, any stock option or unexercised portion thereof which was otherwise exercisable on the date of termination shall expire at the time or times established by the Committee.

Stock Appreciation Rights

A stock appreciation right or a "SAR" is a right to receive, without payment to the Company, a number of shares, cash or any combination thereof, the amount of which is determined pursuant to the formula described below. A SAR may be granted with respect to any stock option granted under the Plan, or alone, without reference to any stock option. A SAR granted with respect to any stock option may be granted concurrently with the grant of such option or at such later time as determined by the Committee and as to all or any portion of the shares subject to the option.

The Plan confers on the Committee discretion to determine the number of shares as to which a SAR will relate as well as the duration and exercisability of a SAR. In the case of a SAR granted with respect to a stock option, the number of shares of common stock to which the SAR pertains will be reduced in the same proportion that the holder exercises the related option. The term of a SAR may not exceed 10 years and one day from the date of grant. Unless otherwise provided by the Committee, a SAR will be exercisable for the same time period as the stock option to which it relates is exercisable. The Committee may accelerate the exercisability of any SAR. Unless otherwise provided by the Committee, any SAR shall become immediately exercisable in the event of specified changes in corporate ownership or control.

Upon exercise of a SAR, the holder is entitled to receive an amount which is equal to the aggregate amount of the appreciation in the shares of common stock as to which the SAR is exercised. For this purpose, the "appreciation" in the shares consists of the amount by which the fair market value of the shares of common stock on the exercise date exceeds (a) in the case of a SAR related to a stock option, the purchase price of the shares under the option or (b) in the case of a SAR granted alone, without reference to a related stock option, an amount determined by the Committee at the time of grant. The Committee may pay the amount of this appreciation to the holder of the SAR by the delivery of common stock, cash, or any combination of common stock and cash.

Restricted Stock

Restricted stock consists of the sale or transfer by the Company to an eligible participant of one or more shares of common stock which are subject to restrictions on their sale or other transfer by the participant. The price at which restricted stock will be sold will be determined by the Committee, and it may vary from time to time and among participants and may be less than the fair market value of the shares at the date of sale. All shares of restricted stock will be subject to such restrictions as the Committee may determine. Subject to

these restrictions and the other requirements of the Plan, a participant receiving restricted stock shall have all of the rights of a stockholder as to those shares, including, for example, the right to vote such shares.

Stock Awards

Stock awards consist of the transfer by the Company to an eligible participant of shares of common stock, without payment, as additional compensation for services to the Company. The number of shares transferred pursuant to any stock award will be determined by the Committee.

Performance Shares

Performance shares consist of the grant by the Company to an eligible participant of a contingent right to receive shares of common stock. The performance shares shall be paid in shares of common stock to the extent performance objectives set forth in the grant are achieved. The number of shares granted and the performance criteria will be determined by the Committee. At the discretion of the Committee, performance shares may be paid in cash in lieu of shares of common stock.

Non-Transferability of Most Incentives

No stock option, SAR, restricted stock or performance award granted under the Plan is transferable by its holder, except in the event of the holder's death, by will or the laws of descent and distribution. During a participant's lifetime, an Incentive may be exercised only by him or her or by his or her guardian or legal representative.

Amendment to the Plan

The Board of Directors may amend or discontinue the Plan at any time. However, no such amendment or discontinuance may, subject to adjustment in the event of a merger, recapitalization, or other corporate restructuring, (a) change or impair, without the consent of the recipient thereof, an Incentive previously granted, (b) materially increase the maximum number of shares of common stock which may be issued to all participants under the Plan, (c) materially change or expand the types of Incentives that may be granted under the Plan, (d) materially modify the requirements as to eligibility for participation in the Plan, or (e) materially increase the benefits accruing to participants. Certain Plan amendments require stockholder approval, including amendments which would materially increase benefits accruing to participants, increase the number of securities issuable under the Plan, or change the requirements for eligibility under the Plan.

Federal Income Tax Consequences

The following discussion sets forth certain United States income tax considerations in connection with the ownership of common stock. These tax considerations are stated in general terms and are based on the Internal Revenue Code of 1986 in its current form and current judicial and administrative interpretations thereof. This discussion does not address state or local tax considerations with respect to the ownership of common stock. Moreover, the tax considerations relevant to ownership of the common stock may vary depending on a holder's particular status.

A participant who receives restricted stock or performance shares subject to restrictions which create a "substantial risk of forfeiture" (within the meaning of section 83 of the Code) will normally realize taxable income on the date the shares become transferable or are no longer subject to substantial risk of forfeiture or on the date of their earlier disposition. The amount of such taxable income will be equal to the amount by which the fair market value of the shares of common stock on the date such restrictions lapse (or any earlier date on which the shares are disposed of) exceeds their purchase price, if any. A participant may elect, however, to include in income in the year of purchase or grant the excess of the fair market value of the shares of common stock (without regard to any restrictions) on the date of purchase or grant over its purchase price. The Company will be entitled to a deduction for compensation paid in the same year and in the same amount as income is realized by the participant.

A participant who receives a stock award under the Plan consisting of shares of common stock will realize ordinary income in the year of the award in an amount equal to the fair market value of the shares of common stock covered by the award on the date it is made, and the Company will be entitled to a deduction equal to the amount the employee is required to treat as ordinary income. A participant who receives a cash award will realize ordinary income in the year the award is paid equal to the amount thereof, and the amount of the cash will be deductible by the Company.

When a non-qualified stock option granted pursuant to the Plan is exercised, the participant will realize ordinary income measured by the difference between the aggregate purchase price of the shares of common stock as to which the option is exercised and the aggregate fair market value of shares of the common stock on the exercise date, and the Company will be entitled to a deduction in the year the option is exercised equal to the amount the participant is required to treat as ordinary income.

Options that qualify as incentive stock options are entitled to special tax treatment. Under existing federal income tax law, if shares purchased pursuant to the exercise of such an option are not disposed of by the optionee within two years from the date of granting of the option or within one year after the transfer of the shares to the optionee, whichever is longer, then (i) no income will be recognized to the optionee upon the exercise of the option; (ii) any gain or loss will be recognized to the optionee only upon ultimate disposition of the shares and, assuming the shares constitute capital assets in the optionee's hands, will be treated as long-term capital gain or loss; (iii) the optionee's basis in the shares purchased will be equal to the amount of cash paid for such shares; and (iv) the Company will not be entitled to a federal income tax deduction in connection with the exercise of the option. The Company understands that the difference between the option price and the fair market value of the shares acquired upon exercise of an incentive stock option will be treated as an "item of tax preference" for purposes of the alternative minimum tax. In addition, incentive stock options exercised more than three months after retirement are treated as non-qualified options.

The Company further understands that if the optionee disposes of the shares acquired by exercise of an incentive stock option before the expiration of the holding period described above, the optionee must treat as ordinary income in the year of that disposition an amount equal to the difference between the optionee's basis in the shares and the lesser of the fair market value of the shares on the date of exercise or the selling price. In addition, the Company will be entitled to a deduction equal to the amount the optionee is required to treat as ordinary income.

If the exercise price of an option is paid by surrender of previously owned shares, the basis of the shares surrendered is carried over to the shares received in replacement of the previously owned shares. If the option is a nonstatutory option, the gain recognized on exercise is added to the basis. If the option is an incentive stock option, the optionee will recognize a gain if the shares surrendered were acquired through the exercise of an incentive stock option and have not been held for the applicable holding period. This gain will be added to the basis of the shares received in replacement of the previously owned shares.

When a stock appreciation right granted pursuant to the Plan is exercised, the participant will realize ordinary income in the year the right is exercised equal to the value of the appreciation the employee is entitled to receive pursuant to the formula described above, and the Company will be entitled to a deduction in the same year and in the same amount.

The Plan is intended to enable the Company to provide certain forms of performance-based compensation to executive officers that will meet the requirements for tax deductibility under Section 162(m) of the Code. Section 162(m) provides that, subject to certain exceptions, the Company may not deduct compensation paid to any one of certain executive officers in excess of \$1 million in any one year. Section 162(m) excludes certain performance-based compensation from the \$1 million limitation.

The discussion set forth above does not purport to be a complete analysis of the potential tax consequences relevant to recipients of options or to the Company or to describe tax consequences based on particular circumstances. It is based on federal income tax and interpretational authorities as of the date of this proxy statement, which are subject to change at any time.

Proposed Amendment to Plan

If approved by our stockholder at the annual meeting, the proposed amendment to the Plan will increase the total number of shares of our common stock subject to the Plan from 5,517,676 to 9,500,000 shares. As of the record date for the annual meeting, we have outstanding under the Plan stock options representing the right to purchase an aggregate of 4,307,749 shares of our common stock at a weighted average exercise price of \$2.10 and an average remaining life of 5.8 years. In addition to the shares reserved for issuance pursuant to the outstanding stock options, we have already issued an additional 240,025 shares of common stock under the Plan pursuant to exercises of stock options. Because the maximum number of shares of common stock

remaining available for issuance under the Plan is reduced by the number of shares that (i) are issued pursuant to the Plan, or (ii) are subject to outstanding Incentives, there remain only 969,902 shares available for issuance under the Plan as of the record date for the annual meeting. The following table summarizes the effect that the proposed amendment would have on the number of shares that would be available for issuance based on outstanding grants as of June 10, 2010.

	Without Proposed Amendment	After Approval of Proposed Amendment
Total Shares Subject to Plan	5,517,676	9,500,000
Shares Subject to Outstanding Incentives	4,307,749	4,307,749
Shares Issued Pursuant to Plan Incentives	240,025	240,025
Total Shares Remaining for Issuances of Future Incentives Under Plan	969,902	4,952,226

As presented in the following table, as of June 10, 2010, the 5,517,676 shares of our common stock currently subject to the Plan (including currently outstanding shares issued upon the exercise of previously-granted Incentives) represent 12% of the total shares of our common stock currently outstanding on a fully-diluted basis, assuming the issuance of all shares available for issuance under the Plan and the issuance of 6,506,234 shares issuable upon the exercise (at prices ranging from \$0.94 to \$2.71 per share, with a weighted average of \$1.61 per share) of outstanding warrants and other options to purchase common stock. If the proposed amendment to the Plan is adopted, the 9,500,000 shares of our common stock subject to the Plan (including currently outstanding shares issued upon the exercise of previously-granted Incentives) would represent 19% of the total shares of our common stock outstanding as of June 10, 2010, on a fully-diluted basis.

	Without Proposed Amendment	After Approval of Proposed Amendment
Total Shares Subject to 2005 Plan	5,517,676	9,500,000
Total Shares Issued and Outstanding at Record Date	34,560,824	34,560,824
Shares Issuable Upon the Exercise of Outstanding Warrants and Other Options	6,506,234	6,506,234
Shares Subject to Future Issuance Under Plan ⁽¹⁾	5,277,651	9,259,975
Fully-Diluted Shares Outstanding ⁽²⁾	46,344,709	50,327,033
Total Shares Subject to 2005 Plan as Percentage of Fully-Diluted Shares	12%	19%

(1) Represents total shares subject to the Plan, less the number of outstanding shares currently issued and outstanding pursuant to the exercise of previously-granted stock options.

(2) Assumes the issuance of all shares subject to future issuance under the Plan and shares issuable upon the exercise (at prices ranging from \$0.94 to \$2.71 per share, with a weighted average of \$1.61 per share) of outstanding warrants and other options to purchase common stock.

Securities Authorized for Issuance Under Equity Compensation Plans

The Plan, which is currently our only equity compensation plan, has been approved by our stockholders. The following table sets forth certain information as of December 31, 2009 with respect to the Plan:

Plan category	Number of Securities to be Issued Upon Exercise of Outstanding Options (A)	Weighted-Average Exercise Price of Outstanding Options	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (A))
Equity compensation plans approved by stockholders:	4,307,749	\$ 2.10	969,902
Equity compensation plans not approved by stockholders:	593,750	\$ 2.71	—
Total	4,441,402	\$ 2.22	969,902

Option Grants Currently Outstanding

The following table sets forth the recipients of outstanding stock option awards that we have granted under the Plan as of as of June 10, 2010 to (i) our named executive officers (including former executive officers), (ii) our current executive officers as a group, (iii) our current non-employee directors as a group, and (iv) our consultants as a group. The only type of awards granted pursuant to the Plan as of June 10, 2010 has been stock options.

Name	Shares Underlying Options (#)	Percent of Total Shares Underlying Awards Under Plan (%)
Joshua Kazam	140,000	3%
Peter M. Strumph	1,232,054	22%
Daron Evans	562,803	10%
Hsiao Lieu	446,202	8%
Current executive officers as a group	1,149,005	21%
Current non-employee directors as a group	1,065,000	19%
Consultants as a group	861,690	16%

VOTE REQUIRED

The affirmative vote of a majority of the votes cast is required to ratify and approve the proposed amendment to the Plan to increase the number of shares of the Company's common stock issuable thereunder from 5,517,676 to 9,500,000 shares

RECOMMENDATION

The Board of Directors unanimously recommends that the stockholders vote "FOR" ratification and approval of the amendment to the Amended and Restated 2005 Stock Option Plan.

PROPOSAL NO. 3:

**RATIFICATION OF APPOINTMENT OF
INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Audit Committee of the Board of Directors has selected Crowe Horwath LLP (“Crowe”), an independent registered public accounting firm, to audit the financial statements of the Company for fiscal 2010. As described below under “Changes in our Independent Registered Public Accounting Firm,” the selection of Crowe was the result of the combination of Hays & Company LLP (“Hays”), the Company’s previous independent registered public accounting firm, and Crowe. Stockholder ratification of the appointment is not required under the laws of the State of Delaware, but the Board of Directors has decided to ascertain the position of the stockholders on the appointment. In the event of a negative vote, the Audit Committee will reconsider its selection. We expect that representatives of both Crowe and Hays will be in attendance at the Annual Meeting, will have an opportunity to make a statement if they so desire, and will be available to respond to appropriate questions.

VOTE REQUIRED

The affirmative vote of a majority of the votes cast is required to ratify the appointment of Crowe Horwath LLP as the Company’s independent registered public accounting firm for fiscal 2010.

RECOMMENDATION

The Board of Directors unanimously recommends that the stockholders vote “FOR” the ratification of the appointment of Crowe Horwath LLP as the Company’s independent registered public accounting firm for fiscal 2010. Unless you indicate otherwise, your proxy will be voted “FOR” ratification.

The following is a summary of the fees billed to us by Hays & Company LLP and Crowe Horwath LLP, our independent registered public accounting firms for professional services rendered for fiscal years ended December 31, 2009 and 2008:

Service Category	Fiscal Year Ended December 31,	
	2009	2008
Audit Fees	\$ 112,100	\$ 108,351
Audit-Related Fees	0	5,528
Tax Fees	6,000	6,000
All Other Fees	0	0
Total Fees	\$ 118,100	\$ 119,879

In the above table, in accordance with the SEC’s definitions and rules, “audit fees” are fees for professional services for the audit and review of our annual financial statements, as well as the audit and review of our financial statements included in our registration statements filed under the Securities Act and issuance of consents and for services that are normally provided by the accountant in connection with statutory and regulatory filings or engagements except those not required by statute or regulation; “audit-related fees” are fees for assurance and related services that were reasonably related to the performance of the audit or review of our financial statements, including attestation services that are not required by statute or regulation, due diligence and services related to acquisitions; “tax fees” are fees for tax compliance, tax advice and tax planning; and “all other fees” are fees for any services not included in the first three categories.

Audit Committee Pre-Approval Process

Pursuant to our Audit Committee Charter, before the independent registered public accounting firm is engaged by the Company or its subsidiaries to render audit or non-audit services, the Audit Committee pre-approves the engagement. Audit Committee pre-approval of audit and non-audit services is not required if the engagement for the services is entered into pursuant to pre-approval policies and procedures established by the Audit Committee regarding the Company’s engagement of the independent registered public accounting firm, provided the policies and procedures are detailed as to the particular service, the Audit Committee is informed

of each service provided and such policies and procedures do not include delegation of the Audit Committee's responsibilities under the Exchange Act to the Company's management. The Audit Committee may delegate to one or more designated members of the Audit Committee the authority to grant pre-approvals, provided such approvals are presented to the Audit Committee at a subsequent meeting. If the Audit Committee elects to establish pre-approval policies and procedures regarding non-audit services, the Audit Committee must be informed of each non-audit service provided by the independent registered public accounting firm. Audit Committee pre-approval of non-audit services (other than review and attest services) also is not be required if such services fall within available exceptions established by the SEC. None of the services provided by our independent registered public accounting firm for fiscal 2008 or 2009 were obtained in reliance on the waiver of the pre-approval requirement afforded in SEC regulations.

CHANGES IN OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

On August 6, 2009, we engaged Crowe Horwath LLP (“Crowe”) to be our independent registered public accounting firm. The engagement of Crowe was the result of the combination of Hays & Company LLP (“Hays”), the Company’s then-current independent registered public accounting firm, with Crowe. The same Hays personnel that served the Company in the past have continued to serve the Company following its engagement of Crowe. Hays’ combination with Crowe occurred as a matter of law; the Company took no action to dismiss Hays, and Hays did not inform the Company that it resigned as the Company’s principal independent accountant. The engagement of Crowe was approved by the Audit Committee of the Company’s Board of Directors.

The reports of Hays on their audits of the Company’s financial statements as of and for the fiscal years ended December 31, 2008 and 2007, contained no adverse opinion or disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope or accounting principles, except as follows: Hays’ report on the Company’s financial statements as of and for the year ended December 31, 2008, which financial statements were included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2008, contained an explanatory paragraph that included a statement that the Company’s lack of revenue and recurring losses from operations raised substantial doubt about the Company’s ability to continue as a going concern.

During the fiscal years ended December 31, 2008 and 2007, and the subsequent interim period through August 6, 2009, the date of the Company’s engagement of Crowe, there were no disagreements with Hays on any matter of accounting principles and practices, financial statement disclosure or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Hays, would have caused them to make reference thereto in their report on the financial statements for such years. During the fiscal years ended December 31, 2008 and 2007, and through August 6, 2009, none of the reportable events specified in Item 304(a)(v) of Regulation S-K occurred.

During the fiscal years ended December 31, 2008 and 2007, and through August 6, 2009, the Company did not consult with Crowe 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 either a written report was provided to the Company or oral advice was provided that Hays concluded 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 the subject of a disagreement and required to be reported under Item 304(a)(1)(iv) or Item 304(a)(1)(v) of Regulation S-K and the related instructions thereto.

OTHER MATTERS

Transactions with Related Persons

On June 24, 2009, we entered into a services agreement with Two River Consulting, LLC, or TRC, to provide us with various clinical development, operational and administrative services for a period of one year. As compensation for such services, we will pay to TRC a monthly cash fee of \$65,000 and we issued stock options to purchase up to an aggregate of 750,000 shares of our common stock at a price per share equal to \$0.89, the closing sale price of our common stock on June 24, 2009. Shares relating to 25% of this option vested immediately and the remaining shares will vest pursuant to the achievement of certain milestones relating to the development of CD-NP. In February 2010, an additional 318,750 shares subject to this option vested and 56,250 shares subject to the option were forfeited. As of March 1, 2010, an additional 187,500 shares currently remain unvested and will vest pursuant to the achievement of a final clinical development milestone. Instead of issuing the stock option to TRC, at TRC’s direction, the options were issued to designated employees of TRC who are engaged in performing the services under the services agreement.

Joshua A. Kazam, our President & Chief Executive Officer and director, Arie S. Belldegrun, a current director, and David M. Tanen, a director of the Company until September 2009, are the principal owners of TRC. None of Messrs. Kazam and Tanen and Dr. Belldegrun received any of the stock options issued by us pursuant to the services agreement. The terms of the services agreement with TRC were reviewed and approved by a special committee of our Board of Directors consisting of Pedro Granadillo, Paul Mieyal and Greg Schafer. None of the members of the special committee has any interest in TRC or the agreement.

In connection with our July 2009 private placement, we engaged Riverbank Capital Securities, Inc., or Riverbank, a FINRA member broker dealer, to serve as our placement agent. Riverbank was not paid a cash commission for its services in connection with the financing. However, we issued Riverbank (or its designees) warrants to purchase 218,300 shares of our common stock. The warrants issued to Riverbank have an exercise price of \$1.375, which is equal to 110% of the closing price of the units sold to investors, and have a cashless (net) exercise provision. We also paid Riverbank an expense allowance of \$50,000 to cover expenses incurred during the financing.

Each of Messrs. Kazam, Tanen and Peter M. Kash, also a member of our board of directors, are officers of and collectively control Riverbank. The selection of Riverbank as placement agent and the terms of the engagement were reviewed and approved by a special committee of our Board consisting of Pedro Granadillo, Paul Mieyal and Gregory Schaefer, none of whom has any interest or other relationship in Riverbank or its affiliates.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires the Company's directors and officers and persons who own more than ten percent of a registered class of the Company's equity securities to file reports of ownership and reports of changes in the ownership with the SEC. Such persons are required by SEC regulations to furnish the Company with copies of all Section 16(a) forms they file. Based solely on its review of the copies of the forms submitted to it during the last fiscal year, the Company believes that, during the last fiscal year, all such reports were timely filed. With respect to the prior fiscal year, however, Dr. Mieyal filed a Form 4 on January 22, 2009 to report an option grant made on December 23, 2008.

The Board of Directors does not intend to present at the Annual Meeting any other matter not referred to above and does not presently know of any matter that may be presented at the Annual Meeting by others. However, if other matters properly come before the Annual Meeting, it is the intention of the persons named in the enclosed proxies to vote the proxy in accordance with their best judgment.

By Order of The Board of Directors,
NILE THERAPEUTICS, INC.
/s/ Joshua A. Kazam
Joshua A. Kazam
Chief Executive Officer

San Mateo, California
June 15, 2010

NILE THERAPEUTICS, INC.**Amended and Restated 2005 Stock Option Plan**

1. **Purpose.** The purpose of the Amended and Restated 2005 Stock Option Plan (the “**Plan**”) of Nile Therapeutics, Inc. (the “**Company**”) is to increase shareholder value and to advance the interests of the Company by furnishing a variety of economic incentives (“**Incentives**”) designed to attract, retain and motivate employees, directors and consultants. Incentives may consist of opportunities to purchase or receive shares of Common Stock, \$0.001 par value, of the Company (“**Common Stock**”), monetary payments or both on terms determined under this Plan.

2. **Certain Transactions.** Pursuant to a merger agreement dated August 15, 2007 (the “**Merger Agreement**”), between SMI Products, Inc. (“**SMI**”), Nile Merger Sub., Inc., a Delaware corporation and wholly-owned subsidiary of SMI (“**Nile Merger Sub**”), and Nile Therapeutics, Inc. (“**Old Nile**”), on September 17, 2007, Nile Merger Sub merged with and into Old Nile, with Old Nile remaining as the surviving entity and a wholly-owned operating subsidiary of SMI. On September 17, 2007, Old Nile merged with and into SMI with SMI remaining as the surviving corporation to that merger (both mergers, together, the “**Mergers**”). Pursuant to the Mergers, and in accordance with Sections 13.6 of this Plan, each share of the common stock then subject to the Plan was substituted with 2.71 shares of common stock of SMI, par value \$0.001 per share (the “**SMI Common Stock**”). In connection with the Mergers, SMI changed its corporate name to “Nile Therapeutics, Inc.”, and this plan was assumed by the Company.

3. **Administration.**

3.1. The Plan shall be administered by a committee of the Board of Directors of the Company (the “**Committee**”). The Committee shall consist of not less than two directors of the Company who shall be appointed from time to time by the board of directors of the Company. Each member of the Committee shall be a “non-employee director” within the meaning of Rule 16b-3 of the Exchange Act of 1934, as amended (together with the rules and regulations promulgated thereunder, the “**Exchange Act**”), and an “outside director” as defined in Section 162(m) of the Internal Revenue Code of 1986, as amended (the “**Code**”). The Committee shall have complete authority to determine all provisions of all Incentives awarded under the Plan (as consistent with the terms of the Plan), to interpret the Plan, and to make any other determination which it believes necessary and advisable for the proper administration of the Plan. The Committee’s decisions and matters relating to the Plan shall be final and conclusive on the Company and its participants. No member of the Committee will be liable for any action or determination made in good faith with respect to the Plan or any Incentives granted under the Plan. The Committee will also have the authority under the Plan to amend or modify the terms of any outstanding Incentives in any manner; provided, however, that the amended or modified terms are permitted by the Plan as then in effect and that any recipient on an Incentive adversely affected by such amended or modified terms has consented to such amendment or modification. No amendment or modification to an Incentive, however, whether pursuant to this Section 3 or any other provisions of the Plan, will be deemed to be a re-grant of such Incentive for purposes of this Plan. If at any time there is no Committee, then for purposes of the Plan the term “Committee” shall mean the Company’s Board of Directors.

3.2. In the event of (i) any reorganization, merger, consolidation, recapitalization, liquidation, reclassification, stock dividend, stock split, combination of shares, rights offering, extraordinary dividend or divestiture (including a spin-off) or any other similar change in corporate structure or shares, (ii) any purchase, acquisition, sale or disposition of a significant amount of assets or a significant business, (iii) any change in accounting principles or practices, or (iv) any other similar change, in each case with respect to the Company or any other entity whose performance is relevant to the grant or vesting of an Incentive, the Committee (or, if the Company is not the surviving corporation in any such transaction, the board of directors of the surviving corporation) may, without the consent of any affected participant, amend or modify the vesting criteria of any outstanding Incentive that is based in whole or in part on the financial performance of the Company (or any subsidiary or division thereof) or such other entity so as equitably to reflect such event, with the desired result that the criteria for evaluating such financial

performance of the Company or such other entity will be substantially the same (in the sole discretion of the Committee or the board of directors of the surviving corporation) following such event as prior to such event; provided, however, that the amended or modified terms are permitted by the Plan as then in effect.

4. Eligible Participants. Employees of the Company or its subsidiaries (including officers and employees of the Company or its subsidiaries), directors and consultants, advisors or other independent contractors who provide services to the Company or its subsidiaries (including members of the Company's scientific advisory board) shall become eligible to receive Incentives under the Plan when designated by the Committee. Participants may be designated individually or by groups or categories (for example, by pay grade) as the Committee deems appropriate. Participation by officers of the Company or its subsidiaries and any performance objectives relating to such officers must be approved by the Committee. Participation by others and any performance objectives relating to others may be approved by groups or categories (for example, by pay grade) and authority to designate participants who are not officers and to set or modify such targets may be delegated.

5. Types of Incentives. Incentives under the Plan may be granted in any one or a combination of the following forms: (a) incentive stock options and non-statutory stock options (Section 7); (b) stock appreciation rights ("SARs") (Section 8); (c) stock awards (Section 9); (d) restricted stock (Section 9); and (e) performance shares (Section 10).

6. Shares Subject to the Plan.

6.1. Number of Shares. Subject to adjustment as provided in Section 13.6, the number of shares of Common Stock which may be issued under the Plan shall not exceed 9,500,000 shares of Common Stock. Shares of Common Stock that are issued under the Plan or that are subject to outstanding Incentives will be applied to reduce the maximum number of shares of Common Stock remaining available for issuance under the Plan.

6.2. Cancellation. To the extent that cash in lieu of shares of Common Stock is delivered upon the exercise of an SAR pursuant to Section 8.4, the Company shall be deemed, for purposes of applying the limitation on the number of shares, to have issued the greater of the number of shares of Common Stock which it was entitled to issue upon such exercise or on the exercise of any related option. In the event that a stock option or SAR granted hereunder expires or is terminated or canceled unexercised or unvested as to any shares of Common Stock, such shares may again be issued under the Plan either pursuant to stock options, SARs or otherwise. In the event that shares of Common Stock are issued as restricted stock or pursuant to a stock award and thereafter are forfeited or reacquired by the Company pursuant to rights reserved upon issuance thereof, such forfeited and reacquired shares may again be issued under the Plan, either as restricted stock, pursuant to stock awards or otherwise. The Committee may also determine to cancel, and agree to the cancellation of, stock options in order to make a participant eligible for the grant of a stock option at a lower price than the option to be canceled.

7. Stock Options. A stock option is a right to purchase shares of Common Stock from the Company. The Committee may designate whether an option is to be considered an incentive stock option or a non-statutory stock option. To the extent that any incentive stock option granted under the Plan ceases for any reason to qualify as an "incentive stock option" for purposes of Section 422 of the Code, such incentive stock option will continue to be outstanding for purposes of the Plan but will thereafter be deemed to be a non-statutory stock option. Each stock option granted by the Committee under this Plan shall be subject to the following terms and conditions:

7.1. Price. The option price per share shall be determined by the Committee, subject to adjustment under Section 13.6.

7.2. Number. The number of shares of Common Stock subject to the option shall be determined by the Committee, subject to adjustment as provided in Section 13.6. The number of shares of Common Stock subject to a stock option shall be reduced in the same proportion that the holder thereof exercises a SAR if any SAR is granted in conjunction with or related to the stock option. No individual may receive options to purchase more than 1,000,000 shares in any year.

7.3. Duration and Time for Exercise. Subject to earlier termination as provided in Section 13.4, the term of each stock option shall be determined by the Committee but shall not exceed ten years and one day from the date of grant. Each stock option shall become exercisable at such time or times during its term as shall be determined by the Committee at the time of grant. The Committee may accelerate the exercisability of any stock option. Subject to the foregoing and with the approval of the Committee, all or any part of the shares of Common Stock with respect to which the right to purchase has accrued may be purchased by the Company at the time of such accrual or at any time or times thereafter during the term of the option.

7.4. Manner of Exercise. Subject to the conditions contained in this Plan and in the agreement with the recipient evidencing such option, a stock option may be exercised, in whole or in part, by giving written notice to the Company, specifying the number of shares of Common Stock to be purchased and accompanied by the full purchase price for such shares. The exercise price shall be payable (a) in United States dollars upon exercise of the option and may be paid by cash; uncertified or certified check; bank draft; (b) at the discretion of the Committee, by delivery of shares of Common Stock that are already owned by the participant in payment of all or any part of the exercise price, which shares shall be valued for this purpose at the Fair Market Value on the date such option is exercised; or (c) at the discretion of the Committee, by instructing the Company to withhold from the shares of Common Stock issuable upon exercise of the stock option shares of Common Stock in payment of all or any part of the exercise price and/or any related withholding tax obligations, which shares shall be valued for this purpose at the Fair Market Value or in such other manner as may be authorized from time to time by the Committee. The shares of Common Stock delivered by the participant pursuant to Section 7.4(b) must have been held by the participant for a period of not less than six months prior to the exercise of the option, unless otherwise determined by the Committee. Prior to the issuance of shares of Common Stock upon the exercise of a stock option, a participant shall have no rights as a shareholder. Except as otherwise provided in the Plan, no adjustment will be made for dividends or distributions with respect to such stock options as to which there is a record date preceding the date the participant becomes the holder of record of such shares, except as the Committee may determine in its discretion.

7.5. Incentive Stock Options. Notwithstanding anything in the Plan to the contrary, the following additional provisions shall apply to the grant of stock options which are intended to qualify as Incentive Stock Options (as such term is defined in Section 422 of the Code):

(a) The aggregate Fair Market Value (determined as of the time the option is granted) of the shares of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any participant during any calendar year (under the Plan and any other incentive stock option plans of the Company or any subsidiary or parent corporation of the Company) shall not exceed \$100,000. The determination will be made by taking incentive stock options into account in the order in which they were granted.

(b) Any Incentive Stock Option certificate authorized under the Plan shall contain such other provisions as the Committee shall deem advisable, but shall in all events be consistent with and contain all provisions required in order to qualify the options as Incentive Stock Options.

(c) All Incentive Stock Options must be granted within ten years from the earlier of the date on which this Plan was adopted by board of directors or the date this Plan was approved by the Company's shareholders.

(d) Unless sooner exercised, all Incentive Stock Options shall expire no later than 10 years after the date of grant. No Incentive Stock Option may be exercisable after ten (10) years from its date of grant (five (5) years from its date of grant if, at the time the Incentive Stock Option is granted, the Participant owns, directly or indirectly, more than 10% of the total combined voting power of all classes of stock of the Company or any parent or subsidiary corporation of the Company).

(e) The exercise price for Incentive Stock Options shall be not less than 100% of the Fair Market Value of one share of Common Stock on the date of grant with respect to an Incentive Stock Option; provided that the exercise price shall be 110% of the Fair Market Value if, at the time the

Incentive Stock Option is granted, the participant owns, directly or indirectly, more than 10% of the total combined voting power of all classes of stock of the Company or any parent or subsidiary corporation of the Company.

8. Stock Appreciation Rights. An SAR is a right to receive, without payment to the Company, a number of shares of Common Stock, cash or any combination thereof, the amount of which is determined pursuant to the formula set forth in Section 8.4. An SAR may be granted (a) with respect to any stock option granted under this Plan, either concurrently with the grant of such stock option or at such later time as determined by the Committee (as to all or any portion of the shares of Common Stock subject to the stock option), or (b) alone, without reference to any related stock option. Each SAR granted by the Committee under this Plan shall be subject to the following terms and conditions:

8.1. Number; Exercise Price. Each SAR granted to any participant shall relate to such number of shares of Common Stock as shall be determined by the Committee, subject to adjustment as provided in Section 13.6. In the case of an SAR granted with respect to a stock option, the number of shares of Common Stock to which the SAR pertains shall be reduced in the same proportion that the holder of the option exercises the related stock option. The exercise price of an SAR will be determined by the Committee, in its discretion, at the date of grant but may not be less than 100% of the Fair Market Value of one share of Common Stock on the date of grant.

8.2. Duration. Subject to earlier termination as provided in Section 13.4, the term of each SAR shall be determined by the Committee but shall not exceed ten years and one day from the date of grant. Unless otherwise provided by the Committee, each SAR shall become exercisable at such time or times, to such extent and upon such conditions as the stock option, if any, to which it relates is exercisable. The Committee may in its discretion accelerate the exercisability of any SAR.

8.3. Exercise. An SAR may be exercised, in whole or in part, by giving written notice to the Company, specifying the number of SARs which the holder wishes to exercise. Upon receipt of such written notice, the Company shall, within 90 days thereafter, deliver to the exercising holder certificates for the shares of Common Stock or cash or both, as determined by the Committee, to which the holder is entitled pursuant to Section 8.4.

8.4. Payment. Subject to the right of the Committee to deliver cash in lieu of shares of Common Stock (which, as it pertains to officers and directors of the Company, shall comply with all requirements of the Exchange Act), the number of shares of Common Stock which shall be issuable upon the exercise of an SAR shall be determined by dividing:

(a) the number of shares of Common Stock as to which the SAR is exercised multiplied by the amount of the appreciation in such shares (for this purpose, the "appreciation" shall be the amount by which the Fair Market Value of the shares of Common Stock subject to the SAR on the exercise date exceeds (1) in the case of an SAR related to a stock option, the exercise price of the shares of Common Stock under the stock option or (2) in the case of an SAR granted alone, without reference to a related stock option, an amount which shall be determined by the Committee at the time of grant, subject to adjustment under Section 13.6); by

(b) the Fair Market Value of a share of Common Stock on the exercise date.

In lieu of issuing shares of Common Stock upon the exercise of a SAR, the Committee may elect to pay the holder of the SAR cash equal to the Fair Market Value on the exercise date of any or all of the shares which would otherwise be issuable. No fractional shares of Common Stock shall be issued upon the exercise of an SAR; instead, the holder of the SAR shall be entitled to receive a cash adjustment equal to the same fraction of the Fair Market Value of a share of Common Stock on the exercise date or to purchase the portion necessary to make a whole share at its Fair Market Value on the date of exercise.

9. Stock Awards and Restricted Stock. A stock award consists of the transfer by the Company to a participant of shares of Common Stock, without other payment therefor, as additional compensation for services to the Company. The participant receiving a stock award will have all voting, dividend, liquidation and other rights with respect to the shares of Common Stock issued to a participant as a stock award under

this Section 9 upon the participant becoming the holder of record of such shares. A share of restricted stock consists of shares of Common Stock which are sold or transferred by the Company to a participant at a price determined by the Committee (which price shall be at least equal to the minimum price required by applicable law for the issuance of a share of Common Stock) and subject to restrictions on their sale or other transfer by the participant, which restrictions and conditions may be determined by the Committee as long as such restrictions and conditions are not inconsistent with the terms of the Plan. The transfer of Common Stock pursuant to stock awards and the transfer and sale of restricted stock shall be subject to the following terms and conditions:

9.1. Number of Shares. The number of shares to be transferred or sold by the Company to a participant pursuant to a stock award or as restricted stock shall be determined by the Committee.

9.2. Sale Price. The Committee shall determine the price, if any, at which shares of restricted stock shall be sold or granted to a participant, which may vary from time to time and among participants and which may be below the Fair Market Value of such shares of Common Stock at the date of sale.

9.3. Restrictions. All shares of restricted stock transferred or sold hereunder shall be subject to such restrictions as the Committee may determine, including, without limitation any or all of the following:

(a) a prohibition against the sale, transfer, pledge or other encumbrance of the shares of restricted stock, such prohibition to lapse at such time or times as the Committee shall determine (whether in annual or more frequent installments, at the time of the death, disability or retirement of the holder of such shares, or otherwise);

(b) a requirement that the holder of shares of restricted stock forfeit, or (in the case of shares sold to a participant) resell back to the Company at his or her cost, all or a part of such shares in the event of termination of his or her employment or consulting engagement during any period in which such shares are subject to restrictions; or

(c) such other conditions or restrictions as the Committee may deem advisable.

9.4. Escrow. In order to enforce the restrictions imposed by the Committee pursuant to Section 9.3, the participant receiving restricted stock shall enter into an agreement with the Company setting forth the conditions of the grant. Shares of restricted stock shall be registered in the name of the participant and deposited, together with a stock power endorsed in blank, with the Company. Each such certificate shall bear a legend in substantially the following form:

The transferability of this certificate and the shares of Common Stock represented by it are subject to the terms and conditions (including conditions of forfeiture) contained in the 2005 Stock Option Plan of Nile Therapeutics, Inc., (the "Company"), and an agreement entered into between the registered owner and the Company. A copy of the 2005 Stock Option Plan and the agreement is on file in the office of the secretary of the Company.

9.5. End of Restrictions. Subject to Section 13.5, at the end of any time period during which the shares of restricted stock are subject to forfeiture and restrictions on transfer, such shares will be delivered free of all restrictions to the participant or to the participant's legal representative, beneficiary or heir.

9.6. Shareholder. Subject to the terms and conditions of the Plan, each participant receiving restricted stock shall have all the rights of a shareholder with respect to shares of stock during any period in which such shares are subject to forfeiture and restrictions on transfer, including without limitation, the right to vote such shares. Dividends paid in cash or property other than Common Stock with respect to shares of restricted stock shall be paid to the participant currently. Unless the Committee determines otherwise in its sole discretion, any dividends or distributions (including regular quarterly cash dividends) paid with respect to shares of Common Stock subject to the restrictions set forth above will be subject to the same restrictions as the shares to which such dividends or distributions relate. In the event the Committee determines not to pay dividends or distributions currently, the Committee will determine in its sole discretion whether any interest will be paid on such dividends or distributions. In addition, the Committee in its sole discretion may require such dividends and distributions to be reinvested (and in

such case the participant consents to such reinvestment) in shares of Common Stock that will be subject to the same restrictions as the shares to which such dividends or distributions relate.

10. Performance Shares. A performance share consists of an award which shall be paid in shares of Common Stock, as described below. The grant of a performance share shall be subject to such terms and conditions as the Committee deems appropriate, including the following:

10.1. Performance Objectives. Each performance share will be subject to performance objectives for the Company or one of its operating units to be achieved by the participant before the end of a specified period. The number of performance shares granted shall be determined by the Committee and may be subject to such terms and conditions, as the Committee shall determine. If the performance objectives are achieved, each participant will be paid in shares of Common Stock or cash as determined by the Committee. If such objectives are not met, each grant of performance shares may provide for lesser payments in accordance with formulas established in the award.

10.2. Not Shareholder. The grant of performance shares to a participant shall not create any rights in such participant as a shareholder of the Company, until the payment of shares of Common Stock with respect to an award.

10.3. No Adjustments. No adjustment shall be made in performance shares granted on account of cash dividends which may be paid or other rights which may be issued to the holders of Common Stock prior to the end of any period for which performance objectives were established.

10.4. Expiration of Performance Share. If any participant's employment or consulting engagement with the Company is terminated for any reason other than normal retirement, death or disability prior to the achievement of the participant's stated performance objectives, all the participant's rights on the performance shares shall expire and terminate unless otherwise determined by the Committee. In the event of termination of employment or consulting by reason of death, disability, or normal retirement, the Committee, in its own discretion may determine what portions, if any, of the performance shares should be paid to the participant.

11. Change of Control.

11.1 Change in Control. For purposes of this Section 11, a "**Change in Control**" of the Company will mean the following:

(a) the sale, lease, exchange or other transfer, directly or indirectly, of substantially all of the assets of the Company (in one transaction or in a series of related transactions) to a person or entity that is not controlled by the Company;

(b) the approval by the shareholders of the Company of any plan or proposal for the liquidation or dissolution of the Company;

(c) any person becomes after the effective date of the Plan the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of (i) 20% or more, but not 50% or more, of the combined voting power of the Company's outstanding securities ordinarily having the right to vote at elections of directors, unless the transaction resulting in such ownership has been approved in advance by the Continuing Directors (as defined below), or (ii) 50% or more of the combined voting power of the Company's outstanding securities ordinarily having the right to vote at elections of directors (regardless of any approval by the Continuing Directors); provided that a traditional institution or venture capital financing transaction shall be excluded from this definition;

(d) a merger or consolidation to which the Company is a party if the shareholders of the Company immediately prior to effective date of such merger or consolidation have "beneficial ownership" (as defined in Rule 13d-3 under the Exchange Act), immediately following the effective date of such merger or consolidation, of securities of the surviving corporation representing (i) 50% or more, but less than 80%, of the combined voting power of the surviving corporation's then outstanding securities ordinarily having the right to vote at elections of directors, unless such merger or consolidation has been approved in advance by the Continuing Directors, or (ii) less than 50% of

the combined voting power of the surviving corporation's then outstanding securities ordinarily having the right to vote at elections of directors (regardless of any approval by the Continuing Directors); or

(e) after the date the Company's securities are first sold in a registered public offering, the Continuing Directors cease for any reason to constitute at least a majority of the Board.

11.2 Continuing Directors. For purposes of this Section 11, "**Continuing Directors**" of the Company will mean any individuals who are members of the Board on the effective date of the Plan and any individual who subsequently becomes a member of the Board whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least a majority of the Continuing Directors (either by specific vote or by approval of the Company's proxy statement in which such individual is named as a nominee for director without objection to such nomination).

11.3 Acceleration of Incentives. Without limiting the authority of the Committee under the Plan, if a Change in Control of the Company occurs whereby the acquiring entity or successor to the Company does not assume the Incentives or replace them with substantially equivalent incentive awards, then, unless otherwise provided by the Committee in its sole discretion in the agreement evidencing an Incentive at the time of grant, then as of the date of the Change of Control (a) all outstanding options and SARs will vest and will become immediately exercisable in full and will remain exercisable for the remainder of their terms, regardless of whether the participant to whom such options or SARs have been granted remains in the employ or service of the Company or any subsidiary of the Company or any acquiring entity or successor to the Company; (b) the restrictions on all shares of restricted stock awards shall lapse immediately; and (c) all performance shares shall be deemed to be met and payment made immediately.

11.4 Cash Payment for Options. If a Change in Control of the Company occurs, then the Committee, if approved by the Committee in its sole discretion either in an agreement evidencing an option at the time of grant or at any time after the grant of an option, and without the consent of any participant affected thereby, may determine that:

(a) some or all participants holding outstanding options will receive, with respect to some or all of the shares of Common Stock subject to such options, as of the effective date of any such Change in Control of the Company, cash in an amount equal to the excess of the Fair Market Value of such shares immediately prior to the effective date of such Change in Control of the Company over the exercise price per share of such options; and

(b) any options as to which, as of the effective date of any such Change in Control, the Fair Market Value of the shares of Common Stock subject to such options is less than or equal to the exercise price per share of such options, shall terminate as of the effective date of any such Change in Control.

If the Committee makes a determination as set forth in subparagraph (a) of this Section 11.4, then as of the effective date of any such Change in Control of the Company such options will terminate as to such shares and the participants formerly holding such options will only have the right to receive such cash payment(s). If the Committee makes a determination as set forth in subparagraph (b) of this Section 11.4, then as of the effective date of any such Change in Control of the Company such options will terminate, become void and expire as to all unexercised shares of Common Stock subject to such options on such date, and the participants formerly holding such options will have no further rights with respect to such options.

12. Per-Person Limitation on Options, SARs and Performance Shares. The number of shares of Common Stock with respect to which Options, SARs and performance shares may be granted under the Plan during any year to an individual participant shall not exceed 1,000,000 Shares, subject to adjustment as provided in Section 13.6.

13. General.

13.1. Effective Date. The Plan became effective upon approval by the Company's board of directors on August 10, 2005, and was amended and restated on September 17, 2007.

13.2. Duration. The Plan shall remain in effect until all Incentives granted under the Plan have either been satisfied by the issuance of shares of Common Stock or the payment of cash or been terminated under the terms of the Plan and all restrictions imposed on shares of Common Stock in connection with their issuance under the Plan have lapsed. No Incentives may be granted under the Plan after the tenth anniversary of the date the Plan is approved by the shareholders of the Company.

13.3. Non-transferability of Incentives. Except, in the event of the holder's death, by will or the laws of descent and distribution to the limited extent provided in the Plan or the Incentive, unless approved by the Committee, no stock option, SAR, restricted stock or performance award may be transferred, pledged or assigned by the holder thereof, either voluntarily or involuntarily, directly or indirectly, by operation of law or otherwise, and the Company shall not be required to recognize any attempted assignment of such rights by any participant. During a participant's lifetime, an Incentive may be exercised only by him or her or by his or her guardian or legal representative.

13.4. Effect of Termination or Death. In the event that a participant ceases to be an employee of or consultant to the Company, or the participant's other service with the Company is terminated, for any reason, including death, any Incentives may be exercised or shall expire at such times as may be determined by the Committee in its sole discretion in the agreement evidencing an Incentive. Notwithstanding the other provisions of this Section 13.4, upon a participant's termination of employment or other service with the Company and all subsidiaries, the Committee may, in its sole discretion (which may be exercised at any time on or after the date of grant, including following such termination), cause options and SARs (or any part thereof) then held by such participant to become or continue to become exercisable and/or remain exercisable following such termination of employment or service and Restricted Stock Awards, Performance Shares and Stock Awards then held by such participant to vest and/or continue to vest or become free of transfer restrictions, as the case may be, following such termination of employment or service, in each case in the manner determined by the Committee; provided, however, that no Incentive may remain exercisable or continue to vest beyond its expiration date. Any Incentive Stock Option that remains unexercised more than one (1) year following termination of employment by reason of death or disability or more than three (3) months following termination for any reason other than death or disability will thereafter be deemed to be a Non-Statutory Stock Option.

13.5. Additional Conditions. Notwithstanding anything in this Plan to the contrary: (a) the Company may, if it shall determine it necessary or desirable for any reason, at the time of award of any Incentive or the issuance of any shares of Common Stock pursuant to any Incentive, require the recipient of the Incentive, as a condition to the receipt thereof or to the receipt of shares of Common Stock issued pursuant thereto, to deliver to the Company a written representation of present intention to acquire the Incentive or the shares of Common Stock issued pursuant thereto for his or her own account for investment and not for distribution; and (b) if at any time the Company further determines, in its sole discretion, that the listing, registration or qualification (or any updating of any such document) of any Incentive or the shares of Common Stock issuable pursuant thereto is necessary on any securities exchange or under any federal or state securities or blue sky law, or that the consent or approval of any governmental regulatory body is necessary or desirable as a condition of, or in connection with the award of any Incentive, the issuance of shares of Common Stock pursuant thereto, or the removal of any restrictions imposed on such shares, such Incentive shall not be awarded or such shares of Common Stock shall not be issued or such restrictions shall not be removed, as the case may be, in whole or in part, unless such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Company. Notwithstanding any other provision of the Plan or any agreements entered into pursuant to the Plan, the Company will not be required to issue any shares of Common Stock under this Plan, and a participant may not sell, assign, transfer or otherwise dispose of shares of Common Stock issued pursuant to any Incentives granted under the Plan, unless (a) there is in effect with respect to such shares a registration statement under the Securities Act of 1933, as

amended (the “**Securities Act**”), and any applicable state or foreign securities laws or an exemption from such registration under the Securities Act and applicable state or foreign securities laws, and (b) there has been obtained any other consent, approval or permit from any other regulatory body which the Committee, in its sole discretion, deems necessary or advisable. The Company may condition such issuance, sale or transfer upon the receipt of any representations or agreements from the parties involved, and the placement of any legends on certificates representing shares of Common Stock, as may be deemed necessary or advisable by the Company in order to comply with such securities law or other restrictions.

13.6. Adjustment. In the event of any merger, consolidation or reorganization of the Company with any other corporation or corporations, there shall be substituted for each of the shares of Common Stock then subject to the Plan, including shares subject to restrictions, options, or achievement of performance share objectives, the number and kind of shares of stock or other securities to which the holders of the shares of Common Stock will be entitled pursuant to the transaction. In the event of any recapitalization, reclassification, stock dividend, stock split, combination of shares or other similar change in the corporate structure of the Company or shares of the Company, the exercise price of an outstanding Incentive and the number of shares of Common Stock then subject to the Plan, including shares subject to restrictions, options or achievements of performance shares, shall be adjusted in proportion to the change in outstanding shares of Common Stock in order to prevent dilution or enlargement of the rights of the participants. In the event of any such adjustments, the purchase price of any option, the performance objectives of any Incentive, and the shares of Common Stock issuable pursuant to any Incentive shall be adjusted as and to the extent appropriate, in the discretion of the Committee, to provide participants with the same relative rights before and after such adjustment.

13.7. Incentive Plans and Agreements. Except in the case of stock awards or cash awards, the terms of each Incentive shall be stated in a plan or agreement approved by the Committee. The Committee may also determine to enter into agreements with holders of options to reclassify or convert certain outstanding options, within the terms of the Plan, as Incentive Stock Options or as non-statutory stock options and in order to eliminate SARs with respect to all or part of such options and any other previously issued options.

13.8. Withholding.

(a) The Company shall have the right to (i) withhold and deduct from any payments made under the Plan or from future wages of the participant (or from other amounts that may be due and owing to the participant from the Company or a subsidiary of the Company), or make other arrangements for the collection of, all legally required amounts necessary to satisfy any and all foreign, federal, state and local withholding and employment-related tax requirements attributable to an Incentive, or (ii) require the participant promptly to remit the amount of such withholding to the Company before taking any action, including issuing any shares of Common Stock, with respect to an Incentive. At any time when a participant is required to pay to the Company an amount required to be withheld under applicable income tax laws in connection with a distribution of Common Stock or upon exercise of an option or SAR, the participant may satisfy this obligation in whole or in part by electing (the “**Election**”) to have the Company withhold from the distribution shares of Common Stock having a value up to the amount required to be withheld. The value of the shares to be withheld shall be based on the Fair Market Value of the Common Stock on the date that the amount of tax to be withheld shall be determined (“**Tax Date**”).

(b) Each Election must be made prior to the Tax Date. The Committee may disapprove of any Election, may suspend or terminate the right to make Elections, or may provide with respect to any Incentive that the right to make Elections shall not apply to such Incentive. An Election is irrevocable.

(c) If a participant is an officer or director of the Company within the meaning of Section 16 of the Exchange Act, then an Election is subject to the following additional restrictions:

(1) No Election shall be effective for a Tax Date which occurs within six months of the grant or exercise of the award, except that this limitation shall not apply in the event death or disability of the participant occurs prior to the expiration of the six-month period.

(2) The Election must be made either six months prior to the Tax Date or must be made during a period beginning on the third business day following the date of release for publication of the Company's quarterly or annual summary statements of sales and earnings and ending on the twelfth business day following such date.

13.9. No Continued Employment, Engagement or Right to Corporate Assets No participant under the Plan shall have any right, because of his or her participation, to continue in the employ of the Company for any period of time or to any right to continue his or her present or any other rate of compensation. Nothing contained in the Plan shall be construed as giving an employee, a consultant, such persons' beneficiaries or any other person any equity or interests of any kind in the assets of the Company or creating a trust of any kind or a fiduciary relationship of any kind between the Company and any such person.

13.10. Deferral Permitted. Payment of cash or distribution of any shares of Common Stock to which a participant is entitled under any Incentive shall be made as provided in the Incentive. Payment may be deferred at the option of the participant if provided in the Incentive.

13.11. Amendment of the Plan. The Board may amend, suspend or discontinue the Plan at any time; provided, however, that no amendments to the Plan will be effective without approval of the shareholders of the Company if shareholder approval of the amendment is then required pursuant to Section 422 of the Code or the rules of any stock exchange or Nasdaq or similar regulatory body. No termination, suspension or amendment of the Plan may adversely affect any outstanding Incentive without the consent of the affected participant; provided, however, that this sentence will not impair the right of the Committee to take whatever action it deems appropriate under Section 13.6 of the Plan.

13.12. Definition of Fair Market Value. For purposes of this Plan, the "Fair Market Value" of a share of Common Stock at a specified date shall, unless otherwise expressly provided in this Plan, be the amount which the Committee or the board of directors of the Company determines in good faith in the exercise of its reasonable discretion to be 100% of the fair market value of such a share as of the date in question; provided, however, that notwithstanding the foregoing, if such shares are listed on a U.S. securities exchange or are quoted on the Nasdaq National Market System or Nasdaq SmallCap Stock Market ("Nasdaq"), then Fair Market Value shall be determined by reference to the last sale price of a share of Common Stock on such U.S. securities exchange or Nasdaq on the applicable date. If such U.S. securities exchange or Nasdaq is closed for trading on such date, or if the Common Stock does not trade on such date, then the last sale price used shall be the one on the date the Common Stock last traded on such U.S. securities exchange or Nasdaq.

13.13 Breach of Confidentiality, Assignment of Inventions, or Non-Compete Agreements. Notwithstanding anything in the Plan to the contrary, in the event that a participant materially breaches the terms of any confidentiality, assignment of inventions, or non-compete agreement entered into with the Company or any subsidiary of the Company, whether such breach occurs before or after termination of such participant's employment or other service with the Company or any subsidiary, the Committee in its sole discretion may immediately terminate all rights of the participant under the Plan and any agreements evidencing an Incentive then held by the participant without notice of any kind.

13.13 Governing Law. The validity, construction, interpretation, administration and effect of the Plan and any rules, regulations and actions relating to the Plan will be governed by and construed exclusively in accordance with the laws of the State of Minnesota, notwithstanding the conflicts of laws principles of any jurisdictions.

13.14 Successors and Assigns. The Plan will be binding upon and inure to the benefit of the successors and permitted assigns of the Company and the participants in the Plan.

PROXY

NILE THERAPEUTICS, INC.

4 West 4th Avenue, Suite 400
San Mateo, California 94402

Annual Meeting of Stockholders - July 26, 2010

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned hereby appoints each of Joshua Kazam and Daron Evans as proxy for the undersigned, with full power of substitution, to represent and to vote all the stock of the undersigned on the following matters as described in the Proxy Statement accompanying the Notice of Annual Meeting, receipt of which is hereby acknowledged, and according to the proxy holder's discretion, on all matters that may be properly presented for action at the Annual Meeting of Stockholders of Nile Therapeutics, Inc. to be held on Monday, July 26, 2010 and at any adjournment(s) or postponement(s) thereof. If properly executed, this proxy shall be voted in accordance with the instructions given. To the extent no directions are given on a proposal, the proxy holder will vote FOR the nominees listed on the reverse side of this proxy, FOR ratification and approval of the amendment to the Company's Amended and Restated 2005 Stock Option Plan and FOR ratification of the appointment of the independent registered public accounting firm and, in the discretion of the proxy holder, on other matters that may properly be presented at the Annual Meeting. The undersigned may revoke this proxy at any time prior to its exercise or may attend the Annual Meeting and vote in person.

■ (Continued and to be signed on the reverse side)

14475 ■

ANNUAL MEETING OF STOCKHOLDERS OF
NILE THERAPEUTICS, INC.

July 26, 2010

NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL:
The proxy statement, proxy card, and Annual Report on Form 10-K
are available at http://www.nilethera.com/inv_sec.html

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

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

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THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE ELECTION OF DIRECTORS, "FOR" PROPOSAL 2 AND "FOR" PROPOSAL 3.
PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE

1. Election of Directors:

- FOR ALL NOMINEES
- WITHHOLD AUTHORITY FOR ALL NOMINEES
- FOR ALL EXCEPT (See instructions below)
- NOMINEES:**
- Arie S. Belldegrun
 - Pedro Granadillo
 - Peter M. Kash
 - Joshua A. Kazam
 - Frank Litvack
 - Paul A. Mieyal
 - Gregory W. Schafer

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

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

Signature of Stockholder _____ Date: _____ Signature of Stockholder _____ Date: _____

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

2. Ratification and approval of an amendment to the Company's Amended and Restated 2005 Stock Option Plan to increase the number of shares of the Company's common stock issuable thereunder from 5,517,676 to 9,500,000. FOR AGAINST ABSTAIN

3. Ratification of appointment of Crowe Horwarth LLP as the independent registered public accounting firm of Nile Therapeutics, Inc. for the fiscal year ending December 31, 2010. FOR AGAINST ABSTAIN