

NANOGEN INC  
Form DEF 14A  
May 05, 2006  
Table of Contents

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

**WASHINGTON, D.C. 20549**

**SCHEDULE 14A INFORMATION**

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement  Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))  
 Definitive Proxy Statement  
 Definitive Additional Materials  
 Soliciting Material Pursuant to §240.14a-11(c) or §240.14a-12

**NANOGEN, INC.**

---

(Name of Registrant as Specified In Its Charter)

N/A

---

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

**Payment of Filing Fee (Check the appropriate box):**

- No fee required.  
 Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11

(1) Title of each class of securities to which transaction applies:

---

Edgar Filing: NANOGEN INC - Form DEF 14A

(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:

---

**Table of Contents**

**10398 Pacific Center Court**

**San Diego, California 92121**

**Tel: (858) 410-4600**

**Fax: (858) 410-4949**

May 5, 2006

Dear Stockholder:

You are cordially invited to attend our Annual Meeting of Stockholders, which will be held on Thursday, June 14, 2006 at 10:00 a.m. at Nanogen's principal executive offices located at 10398 Pacific Center Court, San Diego, California 92121.

The formal notice of the Annual Meeting and the Proxy Statement are attached.

After reading the Proxy Statement, please mark, date, sign and return, as soon as possible, the enclosed proxy card in the prepaid envelope to ensure that your shares will be represented. **YOUR SHARES CANNOT BE VOTED UNLESS YOU SIGN, DATE AND RETURN THE ENCLOSED PROXY CARD OR ATTEND THE ANNUAL MEETING IN PERSON.**

A copy of our Annual Report to Stockholders is also enclosed.

We look forward to seeing you at the meeting.

Sincerely Yours,

**HOWARD C. BIRNDORF**

*Chairman of the Board and*

*Chief Executive Officer*

Table of Contents

# Nanogen, Inc.

---

## Notice of Annual Meeting of Stockholders

To Be Held June 14, 2006

---

The Annual Meeting of Stockholders of Nanogen, Inc. (the Company) will be held at the Company's principal executive offices located at 10398 Pacific Center Court, San Diego, California 92121 on June 14, 2006, at 10:00 a.m., for the following purposes:

1. To elect two (2) Class II directors.
2. To approve an amendment to the 1997 Stock Incentive Plan ( 1997 Stock Plan ) to increase the number of shares authorized for issuance under the 1997 Stock Plan by 1,500,000 shares.
3. To approve an amendment to the Nanogen, Inc. Employee Stock Purchase Plan (the ESPP ) to increase the number of shares authorized for issuance under the ESPP by 500,000 shares.
4. To ratify the appointment of Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2006.
5. To transact such other business as may properly come before the Annual Meeting and any adjournment thereof.

The Board of Directors has fixed the close of business on April 17, 2006, as the record date for determining the stockholders entitled to notice of and to vote at the Annual Meeting and any adjournment thereof. A complete list of stockholders entitled to vote will be available at the Company's principal executive offices located at 10398 Pacific Center Court, San Diego, California 92121, for ten days prior to the meeting.

**WHETHER OR NOT YOU INTEND TO BE PRESENT AT THE ANNUAL MEETING, WE URGE YOU TO MARK, DATE, SIGN AND RETURN THE ENCLOSED PROXY CARD PROMPTLY.**

By order of the Board of Directors

**William L. Respass, Esq.**

*Senior Vice President, General*

*Counsel and Secretary*

May 10, 2006

---

**Table of Contents**

**NANOGEN, INC.**

---

**PROXY STATEMENT**

---

This Proxy Statement is furnished in connection with the solicitation by the Board of Directors (the Board of Directors ) of Nanogen, Inc., a Delaware corporation ( Nanogen or the Company ), of proxies in the accompanying form to be used at the Annual Meeting of Stockholders to be held at the Company's principal executive offices located at 10398 Pacific Center Court, San Diego, California 92121 on June 14, 2006 at 10:00 a.m., and at any adjournment or postponement of the Annual Meeting (the Annual Meeting ).

This Proxy Statement and the accompanying form of proxy are being mailed to stockholders on or about May 10, 2006.

**VOTING PROCEDURES**

The shares represented by proxy received in response to this solicitation and not revoked will be voted at the Annual Meeting. If you hold your shares in your own name as a holder of record, you may instruct the proxy holders how to vote your shares by signing, dating and mailing the proxy card in the postage paid envelope that we have provided. In the event no directions are specified, the shares will be voted FOR the election of the nominees for Class II directors listed in this Proxy Statement and FOR approval of proposals 2, 3 and 4 described in the Notice of Annual Meeting and in this Proxy Statement. You may also vote by attending the Annual Meeting in person.

You may revoke or change your proxy vote at any time before it is actually voted at the Annual Meeting by sending a written notice of revocation or submitting another proxy with a later date to the Secretary of the Company. You may also revoke your proxy by attending and voting in person at the Annual Meeting, but your attendance at the Annual Meeting will not, by itself, constitute a revocation of your proxy. If your shares are registered in the name of a bank or other brokerage firm, you will receive instructions from them that you must follow in order to have your shares voted.

**Who Can Vote**

Stockholders of record at the close of business on April 17, 2006 are entitled to notice of and to vote at the Annual Meeting. As of April 17, 2006 the Company had 60,958,452 shares of common stock, \$0.001 par value per share ( Common Stock ), outstanding and entitled to vote. Each holder of Common Stock is entitled to one vote for each share held as of the record date.

**General Information on Voting**

Holders of a majority of the outstanding shares of Common Stock must be present or represented by proxy at the Annual Meeting in order to have a quorum. Shares that are marked withheld or abstain are treated as being present for purposes of determining the presence of a quorum at the Annual Meeting. If you hold your Common Stock through a bank, broker or other nominee, the broker may be prevented from voting shares held in your account on some proposals (a broker non-vote ) unless you have given voting instructions to your bank, broker or nominee. Shares that are subject to a broker non-vote are counted for purposes of determining whether a quorum exists.

Directors are elected by a plurality vote. Accordingly, each director nominee who receives the most votes cast in his or her favor will be elected. Votes that are withheld from a nominee will be excluded entirely from the election of the Class II directors and will have no effect on the outcome. A broker non-vote has no effect in the

**Table of Contents**

outcome of the election of the directors, as directors are elected by a plurality of the votes cast. Proposals 2, 3 and 4 will be decided by the affirmative vote of a majority of shares present in person or represented by proxy and entitled to vote on each such matter. An abstention on Proposals 2, 3 or 4 has the effect of a vote against the proposal because each proposal requires the affirmative vote of a majority of the shares present in person or represented by proxy and entitled to vote at the meeting. Broker non-votes will have no effect on the outcome of these proposals because under Delaware law shares represented by such broker non-votes are not considered shares present and entitled to vote with respect to such matters.

The Company will bear the expense of printing and mailing proxy materials. In addition to the solicitation of proxies by mail, solicitation may be made by the Company's directors, officers or other employees by telephone, facsimile or other means.

No additional compensation will be paid to such persons for such solicitation. The Company will reimburse brokerage firms and others for their reasonable expenses in forwarding solicitation materials to beneficial owners of the Company's Common Stock.

Management of the Company is not aware of any matters other than those described in this Proxy Statement that may be presented for action at the Annual Meeting. If any other matters properly come before the meeting, persons appointed by the enclosed form of proxy will have discretionary authority to vote such proxies as they decide.

**Recommendations of the Board of Directors**

The Company's Board of Directors recommends a vote:

FOR the election of the nominees to the Board of Directors (Proposal 1);

FOR approval of the amendment to the 1997 Stock Incentive Plan (Proposal 2);

FOR approval of the amendment to the Employee Stock Purchase Plan (Proposal 3); and

FOR ratification of Ernst & Young LLP as our registered public accounting firm for fiscal year 2006 (Proposal 4).

**IMPORTANT**

**WHETHER OR NOT YOU INTEND TO BE PRESENT AT THE ANNUAL MEETING, WE URGE YOU TO MARK, DATE AND SIGN THE ENCLOSED PROXY CARD AND RETURN IT AT YOUR EARLIEST CONVENIENCE IN THE ENCLOSED POSTAGE-PREPAID RETURN ENVELOPE. THIS WILL NOT LIMIT YOUR RIGHTS TO ATTEND OR VOTE AT THE ANNUAL MEETING.**

---

**Table of Contents**

**PROPOSAL 1**

**ELECTION OF DIRECTORS**

The Company's certificate of incorporation provides for a classified Board of Directors consisting of three classes having staggered terms of three years each. The Company's bylaws provide that the Board of Directors shall consist of not less than five nor more than nine members. The Board of Directors currently consists of two Class I directors, two Class II directors, and one Class III director. The Class I directors each have a term expiring at the 2008 annual meeting of stockholders, the Class II directors have a term expiring at the 2006 annual meeting and the Class III director has a term expiring at the 2007 annual meeting of stockholders.

The Nominating, Governance and Ethics Committee of the Board of Directors recommended, and the Board of Directors approved, Stelios B. Papadopoulos and David R. Schreiber as the nominees for election at the Annual Meeting to Class II of the Board of Directors.

Mr. Papadopoulos has served as a director since 1999 and Mr. Schreiber has served as a director since 2003. If elected, Mr. Papadopoulos and Mr. Schreiber will each serve for a term of three years expiring at the 2009 annual meeting of stockholders or until their respective successors shall have been elected and qualified. Mr. Papadopoulos and Mr. Schreiber have each consented to be named as the nominees and agreed to serve if elected. If, however, any of them is unable to serve, proxies will be voted for such persons as the Board of Directors may recommend.

Shares represented by proxy cannot be voted for a greater number of persons than the number of nominees named. The other directors of the Company will continue in office for their existing terms.

**The Board of Directors unanimously recommends that stockholders vote FOR the election of the following nominees to the Board of Directors:**

**NOMINEES TO SERVE AS CLASS II DIRECTORS SERVING A TERM EXPIRING AT THE 2009 ANNUAL MEETING**

*Stelios B. Papadopoulos.* Mr. Papadopoulos has been a director of Nanogen since October 1999. He retired in September 2001 from CN Biosciences, Inc. ( CNBI ), an affiliate of Merck KGaA, Darmstadt, Germany. From January 2001 to September 2001, Mr. Papadopoulos served as Chief Executive Officer and a director of CNBI, and CEO of Merck KGaA's North American Laboratory Business. From August 2000 to December 2000 he acted as an assistant to the General Manager of Merck KGaA's Scientific Laboratory Products Division. From January 1999 to August 2000, he served as the CEO of CNBI. From January 1993 to December 1999, he served as the Chairman and CEO of CNBI. He previously served as President of Fisher Scientific Worldwide, Inc. (now Fisher Scientific International Inc.) from April 1988 to June 1992. From October 1987 to April 1988, he was President of Instrumentation Laboratory. Since March 2003, Mr. Papadopoulos has been serving as a director and as Chairman of the Audit Committee of US LABS, Inc. Mr. Papadopoulos received his B.S. in Aeronautical Engineering from Northrop Institute of Technology.

*David R. Schreiber.* Mr. Schreiber has been a director of Nanogen since June 2003. Mr. Schreiber has served on the board of directors of Specialty Laboratories since June 2004. From November 1996 to July 2003, Mr. Schreiber served as the Senior Vice President, Chief Financial Officer and Secretary of Dianon Systems, Inc., a company that was acquired by the Laboratory Corporation of America ( LabCorp. ) in 2003 and from October 1999 to January, 2003, he served as a director of Dianon. From May 1994 until November 1996, Mr. Schreiber served as Vice President/General Manager-Midwest Region for Corning Clinical Laboratories, which is now Quest Diagnostics. From May 1990 to May 1994, he served as Vice President, Finance & Administration at Unilab Corporation and from August 1986 to May 1990 he served as Regional Controller of the Midwest Region of Corning Clinical Laboratories. Mr. Schreiber received his B.S. in Finance with a minor in Economics in 1982 and his MBA in 1984 from Northern Illinois University.

---

**Table of Contents**

Set forth below is information regarding the continuing directors of Class I and Class III:

**CURRENT CLASS I DIRECTORS SERVING A TERM EXPIRING AT THE 2008 ANNUAL MEETING**

*Howard C. Birndorf.* Mr. Birndorf, a founder of Nanogen, has served as our Chairman of the Board since October 1993. From 1993 to April 2001 he served as Chief Executive Officer, from April 2001 to December 2002 he served as Executive Chairman, and since December 2002 he has served as Chief Executive Officer. Mr. Birndorf also served as our President, from January 2000 to September 2000, and as Chief Financial Officer, from December 1997 to July 1998 and from September 1993 to October 1997. Mr. Birndorf was a co-founder and Chairman Emeritus of Ligand Pharmaceuticals Incorporated, where from January 1988 to November 1991 he was President and Chief Executive Officer. He was also a co-founder, director and Executive Vice President of Gen-Probe Incorporated, co-founder and Vice President of Corporate Development at Hybritech Incorporated, co-founder and director of IDEC Pharmaceuticals Corporation, and was involved in the formation of Gensia Pharmaceuticals, Inc. (currently known as SICOR Inc.) where he was a director. From November 1991 to January 1993, Mr. Birndorf was President of Birndorf Technology Development, an investment and consulting company, and a founding director of Neurocrine Biosciences, Inc. He was a founding director of Graviton, Inc., a wireless sensor company, chairman of the board of FASTRAQ and a director of the Cancer Center of the University of California, San Diego. Mr. Birndorf received a B.A. in Biology from Oakland University and an M.S. in Biochemistry from Wayne State University. Mr. Birndorf received an honorary Doctor of Science degree from Oakland University.

*Robert E. Whalen.* Mr. Whalen has been a director of Nanogen since April 2002. Mr. Whalen has been a Regional Vice President of Quest Diagnostics since March 2003 and prior to the acquisition of Unilab Corporation ( Unilab ) by Quest Diagnostics in February 2003, was Chief Executive Officer, President and a director of Unilab from December 1999 to February 2003. He was elected Chairman of the Board of Unilab in December 1999. From May 1997 to September 1999, Mr. Whalen served as Executive Vice President and, from September 1998 to September 1999, as Chief Operating Officer of Scripps Clinic, a 320-physician multi-specialty medical group located in Southern California. From the April 1995 merger of Roche Biomedical Laboratories and National Health Laboratories, Incorporated ( NHL ) until August 1996, Mr. Whalen served as Executive Vice President of Laboratory Corporation of America ( LabCorp ). Prior to his employment at LabCorp, Mr. Whalen held various senior level positions with NHL, which he joined in 1976. He served as Executive Vice President of NHL from 1993 to 1995, as Senior Vice President from 1991 to 1993 and as Vice President-Administration from 1985 to 1993. From 1979 to 1985, he was Vice President-Division Manager of NHL. At NHL and later at LabCorp, Mr. Whalen oversaw human resources, client service and major regional laboratories in California, Washington, Nevada and Utah.

**CURRENT CLASS III DIRECTOR SERVING A TERM EXPIRING AT THE 2007 ANNUAL MEETING**

*William G. Gerber, M.D.* Dr. Gerber has been a director of Nanogen since June 2005. He is a Partner at Bay City Capital, a life sciences investment fund. He was most recently President and Chief Executive Officer of Epoch BioSciences until its merger with Nanogen in December, 2004. Prior to joining Epoch in September 1999, Dr. Gerber served as President and Chief Executive Officer at diaDexus LLC a joint venture established by Incyte Pharmaceuticals and SmithKline Beecham to apply genomics to the discovery of novel diagnostic products. Dr. Gerber previously served as Vice President and Chief Operating Officer of Onyx Pharmaceuticals, as President of Chiron Diagnostics, and as Senior Vice President and General Manager of the PCR Division with Cetus Corporation. Dr. Gerber is a member of the Board of Directors of Sangamo Biosciences and Chairman of the Board of Directors of Pathway Diagnostics. He also served on and was President of the Board of Medical Quality Assurance, State of California. He received his M.D. and B.S. degrees from the University of California, San Francisco Medical Center after attending Dartmouth College.

**Independence of the Board of Directors**

Our Board of Directors has determined that each of our current directors, except for Mr. Birndorf, our Chairman of the Board and Chief Executive Officer, and Dr. Gerber, is independent within the meaning of the



**Table of Contents**

applicable Nasdaq listing standards. Dr. Gerber is not independent due to his consulting relationship with the Company described under the section Certain Transactions.

**Board Committees**

The Board of Directors has established a Compensation Committee, an Audit Committee, and a Nominating, Governance, and Ethics Committee. The Board of Directors has adopted a written charter for each of these committees, copies of which are available on our website at [www.nanogen.com](http://www.nanogen.com) under our Investor Relations section.

Name	Age	Director	Compensation Committee	Audit Committee	Nominating, Governance, and Ethics Committee
Howard C. Birndorf	56	X			
Robert E. Whalen	63	X	X	X	X
William G. Gerber	59	X			
Stelios B. Papadopoulos	65	X		X	X
David Schreiber	46	X	X	X	X

*Compensation Committee.* The current members of the Compensation Committee are Robert Whalen and David Schreiber. The Board of Directors believes that each of the current members of the Compensation Committee is independent in accordance with the listing standards of the Nasdaq Stock Market. The Compensation Committee held three meetings during 2005. The Compensation Committee's functions are to (i) discharge the Board of Directors responsibilities relating to the compensation of the Company's executive officers, (ii) approve and evaluate the executive officers compensation, plans, policies and programs, and (iii) produce an annual report on executive compensation for inclusion in our proxy statement.

*Audit Committee.* The current members of the Audit Committee are Stelios B. Papadopoulos, David Schreiber and Robert E. Whalen. The Board of Directors believes that each of the members of the Audit Committee is independent in accordance with the listing standards of the Nasdaq Stock Market and under the rules established by the SEC for members of audit committees. Additionally, the Board of Directors has determined that Mr. Papadopoulos is an audit committee financial expert as defined in SEC rules. The Audit Committee held five (5) meetings during 2005. The Audit Committee's functions are to (i) oversee our accounting and financial reporting processes and audits of our financial statements, (ii) assist the Board of Directors in oversight and monitoring of the integrity of our financial statements, our compliance with legal and regulatory requirements, our independent auditor's qualifications, independence and performance, and our internal accounting and financial controls, (iii) prepare an annual report to be included in our annual proxy statement, (iv) provide the Board of Directors with results of its monitoring and recommendations derived there from, and (v) provide the Board of Directors with additional information and materials as it may deem necessary to make the Board of Directors aware of significant financial matters that require the attention of the Board of Directors.

*Nominating, Governance and Ethics Committee.* The current members of the Nominating, Governance and Ethics Committee are David Schreiber, Stelios B. Papadopoulos and Robert E. Whalen. The Board of Directors believes that each member of the Nominating, Governance and Ethics Committee is independent in accordance with the listing standards of the Nasdaq Stock Market. The Nominating, Governance and Ethics Committee held one meeting in 2005.

The Nominating, Governance and Ethics Committee's functions are to select persons to be nominated to the full Board for membership, to develop and recommend to the Board governance and ethics principles applicable to the Company, oversee the evaluation of the Board of Directors and management, and recommend to the Board of Directors nominees for each committee of the Board. The Nominating, Governance and Ethics Committee will consider director candidates recommended by stockholders. To recommend candidates for consideration,

## **Table of Contents**

stockholders should submit the candidates' names and appropriate background and biographical information in writing to the Nanogen Nominating, Governance and Ethics Committee, 10398 Pacific Center Court, San Diego, California 92121. Assuming the appropriate information has been timely provided, the committee will give the same consideration to candidates recommended by Company stockholders as to those recommended by others.

The Nominating, Governance and Ethics Committee reviews the qualifications of potential nominees to determine whether they might make good candidates for consideration for membership on the Board of Directors. The process includes a review of the candidate's character, judgment, experience, independence, understanding of our business or other related industries and such other factors as the Committee determines are relevant in light of the needs of the Board of Directors and the Company. The Committee will select qualified candidates and review its recommendations with the Board of Directors, which will decide whether to invite the candidate to be a nominee for election to the Board of Directors. Although the Committee has the authority to do so, it does not currently pay a fee to any third party to identify or assist in identifying or evaluating potential nominees.

## **Board Meetings and Committees**

The Board of Directors held seven meetings during 2005. Each director attended more than 75% of the total number of meetings of the Board during his respective Board membership and the total number of meetings of the committees on which he served and which were held during the period in which he served on such committee.

## **Stockholder Communications with the Board**

Although we do not have a formal policy regarding stockholder communications, stockholders may communicate with the Board of Directors, including the non-management directors, by sending a letter to the Nanogen Board of Directors, c/o Corporate Secretary, Nanogen, Inc. 10398 Pacific Center Court, San Diego, California 92121. Stockholders who would like their submission directed to a particular member of the Board of Directors may so specify.

## **Annual Meeting Attendance**

Although we do not have a formal policy regarding attendance of the Board of Directors at our annual meetings of stockholders, directors are encouraged to attend our annual meetings. Two directors attended the Company's 2005 annual meeting of stockholders.

## **Company Code of Business Conduct and Ethics**

We have adopted a Code of Business Conduct and Ethics, a code of ethics that applies to all employees, consultants and agents including our executive officers and directors. A copy of the Code of Business Conduct and Ethics is posted on our Internet site at [www.nanogen.com](http://www.nanogen.com). In the event we make any amendments to, or grant any waivers of, a provision of the Code of Business Conduct and Ethics that applies to the principal executive officer, principal financial officer, or principal accounting officer that requires disclosure under applicable SEC rules, we intend to disclose such amendment or waiver and the reasons therefore on our website at [www.nanogen.com](http://www.nanogen.com).

**Table of Contents****SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS, DIRECTORS AND MANAGEMENT**

The following table sets forth information as of March 17, 2006 (except as noted below) as to our shares of Common Stock beneficially owned by (i) each of our directors, (ii) each of our executive officers in the Summary Compensation Table set forth herein, (iii) our current directors and executive officers as a group and (iv) each person known by us to be the beneficial owner of more than 5% of the outstanding shares of our Common Stock.

	<b>Beneficial Ownership</b>	
	<b>of Common Stock<sup>(1)</sup></b>	
	<b>Number of Shares</b>	<b>Percentage of Class</b>
Fisher Scientific International, Inc. <sup>(2)</sup> Liberty Lane Hampton, NH 03842	5,660,377	9.1%
Fort Mason Capital LLC <sup>(3)</sup> 456 Montgomery Street, 22nd Floor San Francisco, CA 94104	5,312,660	8.6%
Howard C. Birndorf <sup>(4)</sup> c/o Nanogen, Inc. 10398 Pacific Center Court San Diego, CA 92121	2,034,302	3.3%
David G. Ludvigson <sup>(5)</sup>	703,107	1.1%
Robert Saltmarsh <sup>(6)</sup>	117,672	*
Graham Lidgard <sup>(7)</sup>	336,067	*
William L. Respass <sup>(8)</sup>	202,149	*
Robert Whalen <sup>(9)</sup>	42,078	*
Stelios Papadopoulos <sup>(10)</sup>	72,078	*
David Schreiber <sup>(11)</sup>	31,307	*
William G. Gerber <sup>(12)</sup>	233,452	*
All directors and executive officers as a group (9 persons) <sup>(13)</sup>	3,772,212	6.1%

\* Less than one percent.

- (1) Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission (the "SEC"), based on factors including voting and investment power with respect to shares. Percentage of beneficial ownership is based on the number of shares of the Company's common stock outstanding as of March 17, 2005. Shares of common stock issuable upon exercise of options currently exercisable, or exercisable within 60 days after March 17, 2006 and shares of common stock issuable within 60 days after March 17, 2006 pursuant to outstanding restricted stock units, are deemed outstanding for purpose of computing the percentage ownership of the person holding such options, but are not deemed outstanding for the computing the percentage ownership of any other person.

## Edgar Filing: NANOGEN INC - Form DEF 14A

- (2) Pursuant to a Schedule 13G filed on March 15, 2006 with the SEC by Fisher Scientific International, Inc. claimed it had share voting power and share dispositive power over 5,660,377 shares of common stock.
- (3) Pursuant to a Schedule 13G/A filed on January 23, 2006 with the SEC by Fort Mason Capital, LLC claimed it had shared voting power and shared dispositive power over 5,312,660 shares of common stock. Fort Mason Master, LP, a Cayman Island limited partnership ( Master ), and Fort Mason Partners, LP, a Delaware limited partnership ( Partners and together with Master, the Funds ), held in aggregate

**Table of Contents**

4,547,354 shares of the common stock and warrants that entitle the Fund to purchase up to an aggregate of 765,306 additional shares at an exercise price of \$4.00 per share. Fort Mason Capital, LLC, a Delaware limited liability company, service as the investment manager of the Funds and possesses sole power to vote and direct the disposition of all securities.

- (4) Includes 1,368,750 shares issuable upon the exercise of options within 60 days of March 17, 2006.
- (5) Includes 601,583 shares issuable upon the exercise of options within 60 days of March 17, 2006.
- (6) Includes 89,062 shares issuable upon the exercise of options within 60 days of March 17, 2006.
- (7) Includes 305,729 shares issuable upon the exercise of options within 60 days of March 17, 2006.
- (8) Includes 157,815 shares issuable upon the exercise of options within 60 days of March 17, 2006.
- (9) Includes 25,000 shares issuable upon the exercise of options within 60 days of March 17, 2006.
- (10) Includes 55,000 shares issuable upon the exercise of options within 60 days of March 17, 2006.
- (11) Includes 18,229 shares issuable upon the exercise of options within 60 days of March 17, 2006.
- (12) Includes 221,968 shares issuable upon the exercise of options within 60 days of March 17, 2006.
- (13) Includes five Board members, one of whom is an executive officer, and four other current executive officers.

**Table of Contents****COMPENSATION OF EXECUTIVE OFFICERS AND DIRECTORS****Executive Officers of the Company**

The names of and certain biographical information of our current executive officers are as follows:

<b>Name</b>	<b>Age</b>	<b>Position</b>
Howard C. Birndorf	56	Chairman and Chief Executive Officer
David Ludvigson	56	President and Chief Operating Officer
Robert Saltmarsh	56	Chief Financial Officer
Graham Lidgard	58	Senior Vice President, Research and Development
William L. Respass	67	Senior Vice President, General Counsel, Secretary

*Howard C. Birndorf.* Mr. Birndorf, a founder of Nanogen, has served as our Chairman of the Board since October 1993. From 1993 to April 2001 he served as Chief Executive Officer, from April 2001 to December 2002 he served as Executive Chairman, and since December 2002 he has served as Chief Executive Officer. Mr. Birndorf also served as our President, from January 2000 to September 2000, and as Chief Financial Officer, from December 1997 to July 1998 and from September 1993 to October 1997. Mr. Birndorf was a co-founder and Chairman Emeritus of Ligand Pharmaceutical Incorporated, where from January 1988 to November 1991 he was President and Chief Executive Officer. He was also a co-founder, director and Executive Vice President of Gen-Probe Incorporated, co-founder and Vice President of Corporate Development at Hybritech Incorporated, co-founder and director of IDEC Pharmaceuticals Corporation, and was involved in the formation of Gensia Pharmaceuticals, Inc. (currently known as SICOR Inc.) where he was a director. From November 1991 to January 1993, Mr. Birndorf was President of Birndorf Technology Development, an investment and consulting company, and a founding director of Neurocrine Biosciences, Inc. He is a founding investor of Kiyon, Inc., chairman of the board of FasTraQ, Inc. and HA Cell Technology, and serves on the advisory board of Scripps Clinic-Green Hospital. In addition, Mr. Birndorf is currently a member of the Board of Directors of Jurilab, Ltd. He received the Life Sciences Legend award at bioFusion 2002. Mr. Birndorf received a B.A. in Biology from Oakland University and an M.S. in Biochemistry from Wayne State University. Mr. Birndorf received honorary Doctor of Science degrees from Oakland University and Wayne State University.

*David G. Ludvigson.* In June of 2004, Mr. Ludvigson was appointed to his current position of President and Chief Operating Officer. Mr. Ludvigson joined Nanogen full-time in May 2003 as Executive Vice President, Chief Financial Officer and Treasurer. Mr. Ludvigson was a director of Nanogen from 1996 until June 2003. Prior to joining Nanogen, he was President and Chief Executive Officer of Black Pearl, Inc. ( Black Pearl ), an event-based business intelligence software company, from November 2001 until January, 2003. Prior to Black Pearl, from August 2000 to January 2001, Mr. Ludvigson was President of InterTrust Technologies, a digital rights management software company. Prior to joining InterTrust Technologies, Mr. Ludvigson was a Senior Vice President and Chief Operating Officer of Matrix Pharmaceuticals, Inc. ( Matrix ) from October 1999 to August 2000. In addition, from 1998 to August 2000 he was also the Chief Financial Officer of Matrix. From February 1996 to June 1998, Mr. Ludvigson was President and Chief Operating Officer of NeTpower. From 1992 to 1995, Mr. Ludvigson was Senior Vice President and Chief Financial Officer of IDEC Pharmaceuticals. Prior to that time, he served as Senior Vice President of Sales and Marketing for Conner Peripherals and as Executive Vice President, Chief Financial Officer and a director of MIPS Computer Systems, Inc., a RISC microprocessor developer and systems manufacturer. Mr. Ludvigson is also a Director of Jurilab, Ltd. and Kiyon, Inc. Mr. Ludvigson received a B.S. and an M.A.S. from the University of Illinois.

*Robert Saltmarsh.* Mr. Saltmarsh has served as Nanogen's Chief Financial Officer since January 2005. Prior to that, he had served as Nanogen's Vice President of Corporate Development since September 2004. Prior to joining Nanogen, Mr. Saltmarsh consulted for a series of start-up companies from June 2002 to August 2004 and taught entrepreneurial finance at the University of California at Riverside from January to June 2004. Previously, he was Chief Financial Officer of Riffage.com from January 2000 to December 2000. Mr. Saltmarsh also served as Vice President of Finance and Treasurer at Silicon Graphics, Inc. from January 1996 to January 2000, and prior to that was Vice President of Finance and Treasurer at Apple Computer. He received a B.A. in Economics and an M.B.A. in Finance from the University of Michigan.

**Table of Contents**

*Graham Lidgard, Ph.D.* Dr. Lidgard joined Nanogen as Senior Vice President, Research and Development, in January 2003 and has over 28 years of experience in the Clinical Diagnostics industry. He was previously vice president of research and development at Gen-Probe from January 1995 to June 2002 where he led the R&D organization to develop DNA probe products for blood screening and STD s as well as the fully automated probe system, TIGRIS. Prior to Gen-Probe he was a co-founder of Matritech Inc., a cancer diagnostics company in Massachusetts which he joined in January 1988, and held several positions with Coming Medical/Ciba Coming from July 1977 to January 1988 including program management, business development, marketing, technology acquisition and product development. Dr. Lidgard received his Ph.D. and B.S. in Biological Chemistry from the University of Manchester.

*William L. Respass, Ph.D., J.D.* Dr. Respass joined Nanogen as Senior Vice President, General Counsel, and Secretary, in April 2004 and has more than three decades of biotechnology experience in intellectual property, licensing and general corporate law. His experience includes positions as Vice President and General Counsel of AME from 2002 to 2004, Senior Vice President and General Counsel of Graviton Incorporated from 2000 to 2002, Senior Vice President and General Counsel of Ligand Pharmaceuticals Incorporated from 1988 to 2000, Vice President and General Counsel of Gen-Probe Incorporated from 1986 to 1988, Vice President and General Counsel of Hybritech Incorporated from 1983 to 1986 and Partner of Lyon & Lyon LLP, a leading intellectual property law firm. He received his J.D. from George Washington University and served as Law Clerk and Technical Advisor to the Honorable J. Lindsay Almond, Jr., on the United States Court of Customs and Patent Appeals. Dr. Respass also earned a Ph.D. in Organic Chemistry from Massachusetts Institute of Technology and a B.S. degree in Chemistry from Virginia Military Institute. He is a member of the American Intellectual Property Law Association and has been a frequent lecturer on intellectual property and licensing law.

**Summary Compensation Information**

The following table provides certain summary information concerning the compensation earned by our Chief Executive Officer and each of the four other most highly compensated executive officers of Nanogen whose salary and bonus for the 2005 fiscal year was in excess of \$100,000, for services rendered in all capacities to Nanogen and its subsidiaries for the fiscal years ended December 31, 2003, 2004 and 2005. No other executive officers who would have otherwise been includable in such table on the basis of salary and bonus earned for the 2005 fiscal year have been excluded by reason of his or her termination of employment or change in executive status during that year. The listed individuals shall be hereinafter referred to as the Named Executive Officers.

Name and Principal Position	Year	Annual Compensation		Long-Term Compensation Awards		All Other Compensation (\$) <sup>(1)</sup>
		Salary (\$)	Bonus(\$)	Restricted Stock Awards(\$)	Securities Underlying Options(#)	
Howard C. Birndorf Chief Executive Officer	2005	\$ 485,000	\$ 38,800 <sup>(4)</sup>		150,000	\$ 2,367
	2004	\$ 485,000	\$ 115,000 <sup>(4)</sup>	\$ 440,000 <sup>(12)</sup>	300,000	\$ 7,328 <sup>(3)</sup>
	2003	\$ 420,000	\$ 67,000 <sup>(2)</sup>		325,000	\$ 46,171 <sup>(3)</sup>
David G. Ludvigson President, Chief Operating Officer	2005	\$ 328,752	\$ 23,100 <sup>(4)</sup>	\$ 220,000 <sup>(13)</sup>	75,000	\$ 148,224 <sup>(15)</sup>
	2004	\$ 277,094	\$ 235,000 <sup>(6)(4)</sup>		450,000	\$ 1,360
	2003	\$ 167,000 <sup>(5)</sup>	\$ 40,000 <sup>(6)</sup>		265,000 <sup>(7)</sup>	\$ 8,074 <sup>(8)</sup>
Rob Saltmarsh Chief Financial Officer	2005	\$ 239,167	36,600 <sup>(4)</sup>	\$ 110,000 <sup>(14)</sup>	187,500	\$ 1,999
	2004	\$ 55,366 <sup>(11)</sup>			25,000	\$ 142 <sup>(11)</sup>
	2003					
William L. Respass Senior Vice President, General Counsel and Secretary	2005			\$ 110,000 <sup>(14)</sup>	37,500	\$ 6,349
	2004	\$ 308,626	\$ 47,123 <sup>(4)</sup>		250,000	\$ 2,723
	2003	\$ 210,385 <sup>(9)</sup>	\$ 44,000 <sup>(4)</sup>			
Graham Lidgard Senior Vice President, Research and Development	2005	\$ 275,000	\$ 34,719 <sup>(4)</sup>	\$ 110,000 <sup>(14)</sup>	37,500	\$ 2,376
	2004	\$ 223,965	\$ 54,000 <sup>(4)</sup>		100,000	\$ 2,070
	2003	\$ 204,000 <sup>(10)</sup>			225,000	\$ 1,750

**Table of Contents**

- (1) Includes imputed income in connection with the excess group term life insurance:

	2005	2004	2003
Mr. Birndorf	\$ 2,367	\$ 2,328	\$ 2,171
Mr. Ludvigson	2,168	1,360	324
Dr. Respass	6,349	2,723	
Dr. Lidgard	2,376	2,070	1,750
Mr. Saltmarsh	\$ 1,999	\$ 142	\$

- (2) Represents the accrued portion of a guaranteed annual bonus of \$100,000, which was eliminated in July 2003.
- (3) Amount includes \$5,000 and \$44,000 for the years ended December 31, 2004 and 2003, respectively, of payments Mr. Birndorf received from a local charter aircraft company related to the our use of his aircraft for business related travel. We did not utilize the aircraft during 2005. For further information concerning the arrangement see Certain Transactions below.
- (4) Represents the Named Executive Officer's bonus earned for the 2005 and 2004 fiscal years but paid in February 2006 and 2005, respectively.
- (5) Mr. Ludvigson joined us as an employee in May 2003, and his salary for 2003 reflects a partial year of service.
- (6) Includes a one-time sign-on bonus of \$150,000 paid in 2004 and \$40,000 paid in 2003.
- (7) Includes options to purchase an aggregate of 73,332 shares that were granted to Mr. Ludvigson in his capacity as a non-employee Board member at the time of grant.
- (8) Includes payments in the aggregate of \$7,750 made for attendance at Board meetings during the period of Mr. Ludvigson's service as a non-employee Board member.
- (9) Dr. Respass joined us in April 2004, and his salary for 2004 reflects a partial year of service.
- (10) Dr. Lidgard joined us in January 2003, and his salary for 2003 reflects a partial year of service.
- (11) Mr. Saltmarsh joined us in September 2004, and his salary for 2004 reflects a partial year of service.
- (12) Represents Restricted Stock Units (RSU's) for 100,000 shares of Common Stock that had a fair market value of \$4.40 per share when those units were awarded on July 29, 2005. On December 31, 2005 Mr. Birndorf held 100,000 unvested RSU's. On December 31, 2005 the fair market value per share of our Common Stock was \$2.63. Accordingly, the value of the shares underlying Mr. Birndorf's unvested RSV's on December 31, 2005 was \$263,000. Such shares will vest and become issuable upon the completion of two years of service measured from the award date.
- (13) RSU's for 50,000 shares of Common Stock that had a fair market value of \$4.40 per share when those units were awarded on July 29, 2005. On December 31, 2005 Mr. Ludvigson held 50,000 unvested RSU's. On December 31, 2005 the fair market value per share of our Common Stock was \$2.63. Accordingly, the value of the shares underlying Mr. Ludvigson's unvested RSU's on December 31, 2005 was \$131,500. Such shares will vest and become issuable upon the completion of two years of service measured from the award date.
- (14) RSU's for 25,000 shares of Common Stock that had a fair market value of \$4.40 per share when those units were awarded on July 29, 2005. On December 31, 2005, Mr. Saltmarsh, Dr. Respass and Dr. Lidgard each held 25,000 unvested RSU's. On December 31, 2005 the fair market value per share of our Common Stock was \$2.63. Accordingly, the value of the shares underlying unvested RSU's held by Mr. Saltmarsh, Dr. Respass and Dr. Lidgard on December 31, 2005 was \$65,750. Such shares will vest and become issuable upon the completion of two years of service measured from the award date.
- (15) Amount includes \$146,056 of Mr. Ludvigson's moving expenses paid in 2005.



**Table of Contents****Stock Options**

The following tables summarize option grants to and exercises by our Named Executive Officers during fiscal 2005, and the value of the options held by such persons at the end of fiscal 2005. None of the Named Executive Officers have been granted stock appreciation rights ( SARs ).

**Option Grants in Fiscal Year 2005**

	Number of Securities Underlying	Individual Grants	Exercise or Base Price	Expiration	Potential Realizable Value as Assumed Annual Rates of Stock Appreciation for Option Term <sup>(3)</sup>	
		Percent of Total Options Granted to Employees in Fiscal Year			5%(\$)	10%(\$)
	Options Granted (#)	2005 <sup>(1)</sup>	(\$/sh) <sup>(2)</sup>	Date		
Howard C. Birndorf	150,000 <sup>(4)</sup>	9.4%	\$ 4.40	7/29/2015	\$ 415,070	\$ 1,051,870
David Ludvigson	75,000 <sup>(4)</sup>	4.7%	\$ 4.40	7/29/2015	\$ 207,535	\$ 525,935
Graham Lidgard	37,500 <sup>(4)</sup>	2.3%	\$ 4.40	7/29/2015	\$ 207,535	\$ 185,115
William L. Respass	37,500 <sup>(4)</sup>	2.3%	\$ 4.40	7/29/2015	\$ 103,768	\$ 262,968
Robert Saltmarsh	37,500 <sup>(4)</sup>	2.3%	\$ 4.40	7/29/2015	\$ 103,768	\$ 262,968
Robert Saltmarsh	150,000 <sup>(5)</sup>	9.4%	\$ 6.21	1/05/2015	\$ 585,815	\$ 1,484,571

- (1) Based on 1,602,245 options granted during the fiscal year ended December 31, 2005.
- (2) The exercise price on the date of grant was equal to 100% of the fair market value on the date of grant.
- (3) The 5% and 10% assumed rates of appreciation are suggested by rules of the Securities and Exchange Commission and do not represent our estimate or projection of the future Common Stock price. There can be no assurance that any of the values reflected in the table will be achieved.
- (4) Options vest over a two-year period of service with the Company measured from the grant date, with 25% vesting after 6 months of service and the balance vesting monthly thereafter.
- (5) Options vest monthly over a four-year period of service with the Company measured from the grant date.

**Aggregated Option Exercises in Fiscal Year 2005 and Value of Options****At End of Fiscal Year 2005**

Name	Shares Acquired on Exercise	Value Realized (\$) <sup>(1)</sup>	Number of Securities Underlying Unexercised Options at End of Fiscal 2005 (#)	Value of Unexercised In-the-Money Options at End of Fiscal 2005(\$) <sup>(2)</sup>
			Exercisable/Unexercisable	Exercisable/Unexercisable
Howard C. Birndorf			1,259,375/240,625	\$ 283,600/\$0
David Ludvigson			517,208/306,250	\$ 0/\$0
Graham Lidgard			261,980/100,520	\$ 81,119/\$30,131
William L. Respass			118,752/168,748	\$ 0/\$0
Robert Saltmarsh			59,375/153,125	\$ 0/\$0

- (1) The value realized upon exercise is (i) the fair market value of the Company's Common Stock on the date of exercise, less the option exercise price per share, multiplied by (ii) the number of shares underlying the options exercised.
- (2) The value of unexercised options is (i) the fair market value of the Company's Common Stock on December 31, 2005, \$2.61 per share (the closing selling price of the Company's Common Stock on that date on the Nasdaq National Market), less the option exercise price of in-the-money options, multiplied by (ii) the number of shares underlying such options.



---

**Table of Contents**

**Employment, Severance and Change in Control Agreements**

*Howard Birndorf*

Effective as of June 3, 2001, we entered into an employment agreement with Howard C. Birndorf relating to his employment as our Executive Chairman. The term of the agreement is three (3) years, subject to automatic renewal for successive additional three (3) year terms. In the event the agreement is not renewed, Mr. Birndorf will become entitled to salary continuation payments for a period of 18 months. The agreement originally provided Mr. Birndorf with (i) an annual base salary of \$365,000, subject to adjustment annually, (ii) an annual guaranteed bonus of \$100,000 and (iii) an additional bonus potential of up to 60% of his base salary contingent upon the Company's achievement of performance goals determined annually by the Board (the Achievement Bonus). In 2003, Mr. Birndorf became the Chief Executive Officer of the Company and a member of the Board of Directors. In connection therewith, Mr. Birndorf agreed to an amendment to his employment agreement pursuant to which his base salary was increased to \$485,000 per year and his \$100,000 guaranteed annual bonus was eliminated. In the event of a change in control or other significant event defined in his employment agreement, Mr. Birndorf will become entitled to a transaction bonus in the amount equal to 180% of his annual base salary (the Transaction Bonus), and accelerated vesting of all of his outstanding options, with such vesting to occur automatically upon a change of control or with the approval of the Board upon the occurrence of any other significant event. Any Transaction Bonus paid to Mr. Birndorf in connection with such a change in control or other significant event will be in lieu of any Achievement Bonus to which he might otherwise become entitled for the year in which such Transaction Bonus is paid. If there is a change in control and Mr. Birndorf's employment is terminated without cause or there is a constructive termination of his employment, including a material reduction in his duties and responsibilities, he will become entitled to salary continuation payments for a period of 18 months. In the event Mr. Birndorf's employment with us is terminated without cause, or in the event of a constructive termination of his employment, in the absence of a change in control, he will become entitled to six months of salary continuation. During any period in which salary continuation payments are being made to Mr. Birndorf, he has agreed not to engage in any business activity that is competitive with us or hire or solicit any employee or exclusive consultant related to our Company.

*Graham Lidgard*

Effective as of January 24, 2003, we entered into an employment agreement with Graham Lidgard. The term of the agreement is three (3) years, subject to automatic renewal for successive additional three (3) year terms. In the event the agreement is not renewed, Dr. Lidgard will become entitled to salary continuation payments for a period of 6 months. Pursuant to this agreement Dr. Lidgard will receive an annual base salary of \$210,000, subject to adjustment annually. Dr. Lidgard will also be entitled to a bonus of up to 50% of his base salary contingent upon our achievement of performance goals determined annually by the Board (the Achievement Bonus). In the event of a change in control or other significant event defined in his employment agreement, Dr. Lidgard will receive a transaction bonus in an amount equal to 50% of his annual base salary (the Transaction Bonus); and all his outstanding options will vest in full, either automatically upon a change of control or with the approval of the Board upon the occurrence of any other significant event. Any Transaction Bonus paid to Dr. Lidgard in connection with such a change in control or other significant event will be in lieu of any Achievement Bonus to which he might otherwise become entitled for the year in which such Transaction Bonus is paid. Dr. Lidgard is also entitled to six months of salary continuation in the event his employment with the Company is terminated without cause or in the event of a constructive termination, including a material reduction in his duties and responsibilities. In the event of Dr. Lidgard's disability, he will be entitled to salary continuation payments until the earlier of (i) 90 days following his termination date due to his disability or (ii) the date he becomes entitled to receive disability benefits payments under the disability insurance policy. During any period in which salary continuation payments are being made he has agreed not to engage in any business activity that is competitive with us or hire or solicit any employee or exclusive consultant of our Company.

*David Ludvigson*

May 1, 2003, we entered into an employment agreement with David Ludvigson whereby he became Executive Vice President, Chief Financial Officer and Treasurer. The agreement provided for an annual base

---

**Table of Contents**

salary of \$250,000, a one time sign-on bonus of \$40,000 and additional incentive compensation of up to 50% of Mr. Ludvigson's base salary, half of which was based solely on the discretion of the Board and the other half of which was contingent upon the Company's achievement of performance goals determined annually by the Board. In June 2004, Mr. Ludvigson became our President and Chief Operating Officer and we entered into a new employment agreement with Mr. Ludvigson effective June 1, 2004. The agreement provides for an annual base salary of \$300,000 and an annual bonus in the amount of up to 55% of his base salary composed as follows: up to 30% of his annual base salary may be awarded based on achievement of annual milestones subject to the approval of the Board of Directors and 25% of his annual salary may be awarded solely at the discretion of the Board of Directors. Mr. Ludvigson also received a one time bonus of \$150,000 and an option to purchase 300,000 shares of Nanogen common stock at fair market value in connection with the June 2004 employment agreement, which options vest in equal monthly installments over a four year period. In the event of a change in control or other significant event defined in his employment agreement, Mr. Ludvigson will become entitled to a transaction bonus in the amount equal to one times his annual base salary (the Transaction Bonus), and accelerated vesting of all of his outstanding options, with such vesting to occur automatically upon a change of control, or with the approval of the Board upon the occurrence of any other significant event. Any Transaction Bonus paid to Mr. Ludvigson in connection with such a change in control or other significant event will be in lieu of any annual bonus to which he might otherwise become entitled for the year in which such Transaction Bonus is paid. In the event Mr. Ludvigson's employment with us is terminated for any reason other than for cause, or in the event of a constructive termination of his employment, in the absence of a change in control, he will become entitled to six months of salary continuation and health insurance benefits.

*William Respass*

On January 28, 2004, we entered into an employment agreement with William Respass relating to his employment as our Senior Vice President, General Counsel and Secretary. The agreement provided for an annual base salary of \$240,000 and a guaranteed annual bonus of \$60,000. On May 3, 2004, the agreement was retroactively awarded to provide a base salary of \$300,000, and eliminate the guaranteed bonus provision. Dr. Respass is eligible for an annual bonus in the amount of up to 50% of his base salary composed as follows: up to 25% of his annual base salary may be awarded based on annual milestones subject to the approval of the Board of Directors and up to 25% of his annual salary may be awarded solely at the discretion of the Board of Directors. In connection with his employment agreement, Dr. Respass also received an option to purchase 200,000 shares of Nanogen common stock at fair market value. The options vest in equal monthly installments over a four year period except that 25% will not vest until the first anniversary, of Dr. Respass' employment. In the event of a change in control or other significant event defined in his employment agreement, Dr. Respass may receive accelerated vesting of all of his outstanding options if determined by the Compensation Committee. In the event Dr. Respass' employment with us is terminated for any reason other than for cause, or in the event of a constructive termination of his employment, in the absence of a change in control, he will become entitled to six months of salary continuation and health insurance benefits.

*Robert Saltmarsh*

On December 20, 2004, we entered into an employment agreement regarding the terms of Robert Saltmarsh's employment. The agreement provides that Mr. Saltmarsh will receive an initial annual base salary of \$240,000 and an annual achievement bonus of up to 50% of his base salary (the Achievement Bonus) based upon the achievement by the Company of its corporate goals as established and determined by the Board of Directors annually, and for other achievements during the year as approved by the Compensation Committee. In addition, Mr. Saltmarsh is entitled to receive a transaction bonus equal to 50% of his base salary upon the occurrence of certain corporate transactions defined in the Employment Agreement (the Transaction Bonus). In the event Mr. Saltmarsh receives a Transaction Bonus, no Achievement Bonus will be paid to Mr. Saltmarsh in the year in which such Transaction Bonus is paid. In connection with his appointment as Chief Financial Officer, on January 5, 2005, the Compensation Committee of the Board of Directors granted Mr. Saltmarsh options to purchase 150,000 shares of our common stock. The options vest in equal monthly installments over a four year period. In the event of a change in control or certain other corporate events, the agreement provides for

---

## **Table of Contents**

accelerated vesting of all of his outstanding options, with such vesting to occur automatically upon a change of control, or with the approval of the Board upon the occurrence of any other significant event. If Mr. Saltmarsh's employment is terminated by us without cause or in the event of a constructive termination, we will continue to pay Mr. Saltmarsh's base salary for six months from the date of such termination as severance compensation. The agreement has an initial term of three years, subject to automatic renewal for successive additional three year terms. In the event the agreement is not renewed, Mr. Saltmarsh will become entitled to salary continuation payments for a period of six months. During any period in which salary continuation payments are being made to Mr. Saltmarsh, he has agreed not to engage in any business activity that is competitive with us or hire or solicit any of our employees or exclusive consultants.

In the event any payment or benefit provided to any individual under the Company's 1997 Stock Incentive Plan would subject that individual to the excise tax imposed by Section 4999 of the Internal Revenue Code relating to excess parachute payments, then such individual will be entitled to receive an additional payment from the Company in an amount equal to the amount of the excise tax imposed on such payment or benefit, together with any interest and penalties (a Gross-Up Payment) plus the income taxes and additional excise tax, together with any interest and penalties, imposed on the Gross-Up Payment.

### **Compensation of Directors**

Each non-employee Board member receives an annual retainer of \$25,000 to be paid entirely in shares of our Common Stock, based on the closing stock price on the date of the Company's Annual Meeting of Stockholders. These shares are issued under our 1997 Stock Incentive Plan. Accordingly, on June 9, 2005 Messrs. Whalen, Gerber, Papadopoulos, Schreiber and Jellinek, now deceased, each received 6,812 shares of our Common Stock. In addition, each non-employee Board member receives an annual retainer of \$1,500, to be paid entirely in cash, for each Board committee on which he or she serves and the Chairmen of the Audit and Compensation Committees receive an additional annual cash retainer of \$10,000 and \$2,500, respectively, for their service on such committees. Non-employee Board members also receive the following additional cash payments: \$2,000 per Board meeting attended (\$750 per Board meeting participated in by phone) and \$750 per Board committee meeting attended or participated in by phone. Pursuant to the 1997 Stock Incentive Plan, each non-employee Board member may elect to convert all or part of his or her annual cash retainer payments and/or meeting fees from us in the form of non-qualified stock options, restricted stock, stock units, or a combination thereof. In 2005, none of our non-employee Board members elected to convert their annual cash retainer payments and cash meeting fees into stock options, restricted stock or restricted stock units.

Upon initial appointment or election to the Board, a non-employee director will receive an option grant under our 1997 Stock Incentive Plan to purchase 25,000 shares of our Common Stock at an exercise price equal to the fair market value of the option shares on the grant date. These options vest at a rate of 25% after one year and the remainder ratably over the remaining three years. The vesting of the option shares will accelerate if there is a Change of Control as defined in the plan. Accordingly, on June 9, 2005 William Gerber and Frank Jellinek each received an option to purchase 25,000 shares of our Common Stock at an exercise price per share of \$3.67, the fair market value of our Common Stock on such date.

In the event any payment or benefit provided under the Company's 1997 Stock Incentive Plan to any Board member would subject that individual to the excise tax imposed by Section 4999 of the Internal Revenue Code relating to excess parachute payments, then such individual will be entitled to receive an additional payment from us in an amount equal to the amount of the excise tax imposed on such payment or benefit, together with any interest and penalties (a Gross-Up Payment) plus the income taxes and additional excise tax, together with any interest and penalties, imposed on the Gross-Up Payment.

### **Compensation Committee Interlocks and Insider Participation**

The following individuals served as members of our Compensation Committee during fiscal year 2005: David Schreiber, Val Buonaiuto and Frank Jellinek, each of whom was an independent director during fiscal year

**Table of Contents**

2005. Mr. Buonaiuto resigned from the Board of Directors on May 25, 2005. During 2005, none of our executive officers served on the compensation committee (or equivalent) or the board of directors of another entity whose executive officer(s) served on our Compensation Committee or Board.

**Securities Authorized for Issuance under Equity Compensation Plans**

The following table provides information with respect to the shares of our Common Stock that may be issued under our existing equity compensation plans as of December 31, 2005. The table excludes information related to the outstanding options granted under our equity compensation plans where no additional options may be granted. Footnote 6 to the table sets forth the total number of shares and weight average of the exercise price of the shares excluded from this table.

**Plan Category**

	A. Number of Shares to be Issued Upon Exercise of Outstanding Options	B. Weighted Average Exercise Price of Outstanding Options	C. Number of Shares Remaining Available for Future Issuance (Excluding Securities Reflected In Column A)
Equity compensation plans approved by stockholders <sup>(1)</sup>	6,309,616 <sup>(2)</sup>	\$ 4.82	498,183 <sup>(3)</sup>
Equity compensation plans not approved by stockholders <sup>(4)</sup>	459,688	\$ 7.20	103,937 <sup>(5)</sup>
<b>Total</b>	<b>6,769,304</b>	<b>\$ 4.98</b>	<b>602,120</b>

- (1) Consists of the Nanogen, Inc. 1998 Employee Stock Purchase Plan (the Purchase Plan), the Nanogen, Inc. Stock Bonus Plan (the Bonus Plan) and our three stock option plans: the 1993 Stock Option Plan, the 1995 Stock Option/Stock Issuance Plan and the 1997 Stock Incentive Plan.
- (2) Excludes purchase rights accruing under the Employee Stock Purchase Plan which has a shareholder approved reserve of 600,000 shares. Under the Employee Stock Purchase Plan, each eligible employee may purchase up to 1,666 shares of Common Stock at semi-annual intervals on the last business day of June and December each year at a purchase price per share equal to 85% of the lower of (i) the closing selling price per share of Common Stock on the last trading day preceding the offering period in which that semi-annual purchase date occurs, or (ii) the closing selling price per share on the semi-annual purchase date.
- (3) Consists of shares available for issuance under the Bonus Plan and the 1997 Stock Incentive Plan. As of December 31, 2005, 178,390 shares were available for issuance under the Bonus Plan and 319,793 shares were available for issuance under the 1997 Stock Incentive Plan, respectively. The 319,793 shares available for issuance under the 1997 Stock Plan may be issued upon the exercise of stock options or stock appreciation rights granted under the plan or those shares may be issued pursuant to direct stock bonuses or restricted stock issuances, restricted stock units or other share right awards which vest upon the attainment of prescribed performance milestones or the completion of designated service periods. The 178,390 shares available under the Bonus Plan may be issued through direct stock bonuses or pursuant to restricted stock or restricted stock unit awards which vest upon the attainment of prescribed performance milestones or the completion of designated service periods.
- (4) Consists of the Epoch Biosciences, Inc. 2003 Stock Incentive Plan. In connection with the acquisition of Epoch Biosciences, Inc., in December 2004, we assumed options to purchase 923,920 shares of Epoch Biosciences, Inc. common stock under the Epoch Biosciences, Inc. 2003 Stock Incentive Plan and converted them into options to purchase 0.4673 shares of Common Stock in accordance with the exchange ratio in effect for that acquisition. The 103,937 shares available for issuance under Epoch Biosciences, Inc. 2003 Stock Incentive Plan, as of December 31, 2005, may be issued upon the exercise of stock options or stock appreciation rights granted under the plan or those shares may be issued pursuant to direct stock bonuses or restricted stock issuances, restricted stock units or other share right awards which vest upon the attainment of prescribed performance milestones or the completion of designated service periods.



**Table of Contents**

- (5) The Epoch Biosciences, Inc. 2003 Stock Incentive Plan contains a provision whereby the share reserve under the plan will automatically increase on the first business day of January each year that the plan remains in existence. The increase to the share reserve under the plan will be limited each year to 350,475 shares or such lesser number of shares as may be determined by the board. Any annual increase will be reduced to the extent necessary to ensure that the number of shares available under the plan (the shares subject to outstanding options plus the remaining unallocated shares available under the plan) does not at the time exceed 2,715,718 shares of our common stock. On January 1, 2006 the number of shares of Common Stock available for issuance under the assumed Epoch Biosciences, Inc. 2003 Stock Incentive Plan increased by 350,475 shares pursuant to the automatic share increase provisions of that plan.
- (6) The table does not include information with respect to outstanding options granted under certain equity compensation plans assumed by us in connection with mergers and acquisitions and which no additional options may be granted. As of December 31, 2005 a total of 862,445 shares of Common Stock were subject to those assumed options, and the weighted average exercise price of those assumed options was \$7.87 per share.

***The Epoch Biosciences, Inc. 2003 Stock Incentive Plan***

As of December 31, 2005, approximately 103,937 shares of Common Stock had been reserved for issuance under the Epoch Biosciences, Inc. 2003 Stock Incentive Plan (as assumed by the Company) to eligible individuals in our service or the service of our subsidiaries. Such eligible individuals include (i) employees, directors and officers of Epoch Biosciences, Inc or its subsidiaries whose service commenced prior to the December 16, 2004 date of the acquisition and (ii) employees, directors and executive officers of Nanogen or its subsidiaries (including Epoch Biosciences, Inc.) whose service commenced or commences after December 16, 2004. Awards under the assumed Epoch Biosciences, Inc. 2003 Stock Incentive Plan may be in the form of non-statutory stock option grants with an exercise price of not less than 100% of the fair market value of the Common Stock on the grant date, stock bonuses for services rendered, or stock issuances with a purchase price not less than 100% of the fair market value of the Common Stock on the award date. No option grants will have a maximum term in excess of 10 years, and each option grant or direct stock issuance will generally vest over one or more years of service. However, upon certain changes in control or ownership, those options and stock issuances may vest in whole or in part on an accelerated basis. As of December 31, 2005 options to purchase 459,688 shares of Common Stock were outstanding under the assumed Epoch Biosciences, Inc. 2003 Stock Incentive Plan, 563,625 shares of Common Stock had been authorized under such plan, and 103,937 shares of Common Stock remained available for future issuance. On January 1, 2006 and 2005 the number of shares of Common Stock available for issuance under the assumed Epoch Biosciences, Inc. 2003 Stock Incentive Plan increased by 350,475 shares pursuant to the automatic share increase provisions of that plan.

**COMPENSATION COMMITTEE REPORT ON EXECUTIVE COMPENSATION**

The Company's various executive compensation programs are administered by the Compensation Committee of the Board of Directors. This report is submitted by the Compensation Committee to assist stockholders in their understanding of the Compensation Committee's objectives and procedures in establishing the compensation packages of the Company's executive officers and describes the basis on which compensation determinations for fiscal year 2005 were made by the Compensation Committee.

**General Compensation Policy**

The Compensation Committee's policy is to compensate executive officers based upon (i) the Company's achievement of performance objectives established by the Compensation Committee in consultation with the Board of Directors and (ii) the individual contributions and achievements of each executive officer. The company's existing compensation structure for executive officers generally includes a combination of (i) base salary that is competitive with the market and reflects individual performance, (ii) annual bonus awards payable



## **Table of Contents**

in cash and tied to the achievement of pre-established performance goals, with a discretionary component based upon the Compensation Committee's assessment of individual performance (the discretionary component applicable in 2005 has been eliminated for 2006), and (iii) long-term stock-based incentive awards designed to strengthen the mutuality of interests between the executive officers and the company's stockholders.

The principal factors which the Compensation Committee considered in establishing the components of each executive officer's compensation package for the 2005 fiscal year are summarized below. The Compensation Committee may, however, at its discretion apply entirely different factors, particularly different measures of company performance, in setting executive compensation for future fiscal years.

### ***Existing Employment Agreements***

In setting the compensation for the executive officers for the 2005 fiscal year, the Compensation Committee took into consideration the provisions of the existing employment agreements with the executive officers. Each of those agreements provides for an annual review of the officer's base salary and target bonuses tied to a specified percentage of such salary. The principal terms of those agreements are summarized in the section of the Proxy Statement above entitled "Employment, Severance and Change in Control Agreements." The Compensation Committee continues to believe that those employment agreements provide the competitive compensation package necessary to retain the services of executive officers essential to the company's future growth and financial success and afford continuity and stability to the company's management team.

### ***Base Salary***

For comparative compensation purposes for the 2005 fiscal year, the Compensation Committee continued its practice of reviewing surveys prepared by The Radford Group and the Biotech Employment Development Coalition (BEDC) which include companies within and outside the industry that are comparable in size with the company and compete with the company for executive talent. The base salary for each officer was determined on the basis of the following factors: the salary levels in effect for comparable positions at the peer group companies (determined on the basis of the published survey data), the experience and personal performance of the officer and internal comparability considerations. The weight given to each of those factors differed from individual to individual, as the Compensation Committee deemed appropriate. On the basis of those weighted factors, the Compensation Committee decided to increase the base salary of Mr. Ludvigson from \$300,000 to \$330,000 and the base salary of Dr. Respos from \$300,000 to \$309,000. The compensation levels for the Company's executive officers for the 2005 fiscal year ranged from approximately the 50<sup>th</sup> percentile to approximately the 75<sup>th</sup> percentile of the base salary levels in effect for executive officers with comparable positions at the peer group companies, based on the published survey data.

In selecting the Radford and BEDC Surveys for comparative compensation purposes, the Compensation Committee considered many factors not directly associated with the stock price performance of companies included in those surveys, such as industry, development stage, organizational structure, number of employees and market capitalization. For that reason, there was no intent to establish a meaningful correlation between the companies included within the peer group identified for comparative compensation purposes and the companies included within the CRSP Total Return Index for Nasdaq Pharmaceutical Stock which the company has selected as the industry index for purposes of the stock performance graph appearing later in this Proxy Statement.

### ***Annual Incentive Compensation***

Traditionally, the annual incentive target bonus for each executive officer has been based on a percentage of that officer's annual base pay (up to 60% for the Chief Executive Officer, up to 55% for the Chief Operating Officer, and up to 50% for each remaining executive officer) and has been tied to the company's achievement of specified performance objectives and, for executive officers other than the Chief Executive Officer and the Chief Operating Officer, the officer's achievement of pre-established personal goals. In addition, the Compensation Committee has retained the discretion under the annual incentive bonus program to award bonuses based on its assessment of each officer's personal contributions and achievements for the year.

---

## **Table of Contents**

The performance objectives for the 2005 fiscal year were tied to an increase in revenue and a reduction in the company's loss for the year and the attainment of certain operating objectives based on product development, the infusion of new capital and the completion of strategic acquisitions. However, only one of the designated performance objectives was attained, and the executive officers only earned 8% of their total target bonus for the year or 20% of the portion of their target bonus based on those performance objectives. The Compensation Committee decided not to award any discretionary bonuses for the 2005 fiscal year based on personal performance. Accordingly, the bonuses for the 2005 fiscal year were substantially less than the 2004 fiscal year bonuses, after annualizing those latter bonuses for certain executive officers who joined the company after the start of the 2004 fiscal year. The actual dollar amount of the 2005 bonus awarded to each named executive officer is set forth in the Summary Compensation Table of the Proxy Statement

### ***Long Term Incentive Compensation***

In the past, long-term incentive compensation has been provided primarily through stock option grants designed to align the interests of each executive officer with those of the company's stockholders by providing such officer with a significant incentive to manage the company from the perspective of an owner with an equity stake in the business. The option grants made in the past to the executive officers allow them to acquire shares of the company's common stock at a fixed price per share (the closing market price on the grant date) over a specified period of time (up to 10 years). Each option generally vests and becomes exercisable in installments over the executive officer's continued employment with the company. Accordingly, the options will provide a return to the executive officer only if the executive officer remains employed by the company during the applicable vesting period, and then only if the market price of the underlying shares appreciates over the option term.

In July 2005, the Compensation Committee decided to award restricted stock units (RSUs) to the executive officers as an additional component of their equity compensation. The decision to use RSUs in combination with stock option grants was made for several reasons, including ongoing concerns over the number of options being granted and their dilutive effect upon the stockholders and the fact that RSUs are less subject to market volatility than stock options. Each RSU entitles the recipient one share of the company's common stock at the time of vesting, with vesting tied to continued service with the company typically over a two-year period. As the units vest, the underlying shares of common stock are issued, without any cash outlay required of the recipient, subject to satisfaction of the applicable withholding taxes.

The Compensation Committee has established certain guidelines applicable to the long-term equity compensation to be awarded the executive officers, but has the flexibility to make adjustments to those guidelines at its discretion. The current guidelines provide for the grant of equity awards that involve fewer shares of common stock than in earlier years due to the inclusion of RSUs. The Compensation Committee believes that the combination of RSUs and stock options will provide the executive officers and other employees of the company with a competitive and more balanced equity compensation package, while at the same time reducing the total number of shares issuable under employee grants.

In addition to the foregoing guidelines, the Compensation Committee set the size of the combined option and the RSU grant made to each executive officer during the 2005 fiscal year at a level that was intended to create a meaningful opportunity for stock ownership based upon such officer's current position with the company, his or her personal performance in recent periods, and his or her potential for future responsibility and promotion. In making such awards in the future, the Compensation Committee will also take into consideration the number and value of unvested options and RSUs already held by the executive officer and the gains realized by such officer as a result of prior awards.

### **Executive Chairman and Chief Executive Officer Compensation**

The Compensation Committee did not adjust the base salary for Howard C. Birndorf, the Company's Chief Executive Officer, for the 2005 fiscal year, and his salary accordingly remained at the \$485,000 level established

## **Table of Contents**

for him during the 2004 fiscal year. Mr. Birndorf's rate of base salary for the 2005 fiscal year was at approximately the 65th percentile of the base salary levels in effect for other chief executive officers at the peer group of companies surveyed for comparative compensation purposes (utilizing the Radford survey). For the 2005 fiscal year, Mr. Birndorf was awarded a bonus of \$38,800 based on the company's attainment of one of the designated performance objectives for that year. The performance objectives established for the Chief Executive Officer for the 2005 fiscal year were the same for all the other executive officers. As indicated above, the Compensation Committee did not award any discretionary bonuses to the executive officers for the 2005 fiscal year.

Mr. Birndorf is a member of the Board of Directors, but did not participate in matters involving the evaluation of his performance or the setting of his compensation and did not receive any additional compensation for his service in such capacity.

## **Planned Executive Compensation Policy Changes**

As part of the Compensation Committee's process during the 2006 fiscal year, the Compensation Committee has decided to retain the services of an independent compensation consulting firm to analyze the various components of the existing compensation packages for the executive officers and to make recommendations for revising or establishing new compensation programs which will more directly tie compensation to company performance. However, in furtherance of the objective to more directly tie compensation to company performance, the incentive bonus plan which the Compensation Committee has implemented for the 2006 fiscal year will, for the Chief Executive Officer, the Chief Operating Officer, the Chief Financial Officer and the General Counsel, be based solely on the company's attainment of specific milestones tied to revenue and EBITDA objectives and the attainment of certain strategic operational objectives, including the integration of acquired business operations, and will not provide any incentive component tied to the achievement of personal goals nor any discretionary element based upon the Compensation Committee's evaluation of the individual performance or other subjective factors. Accordingly, for those four executive officers, the 2006 cash incentive plan will be strictly a "pay for performance" program driven solely by the company's financial and operational performance for the year. For the remaining executive officers, not less than 50% of their incentive bonus opportunity will be tied to objective performance measures.

## **Compliance with Internal Revenue Code Section 162(m).**

Section 162(m) of the Internal Revenue Code disallows an income tax deduction to publicly held companies for compensation paid to certain of their executive officers, to the extent that compensation exceeds \$1 million per covered officer in any fiscal year. The limitation applies only to compensation which is not considered to be performance-based. Non-performance based compensation paid to the company's executive officers for the 2005 fiscal year did not exceed the \$1 million limit per officer, and the Compensation Committee does not anticipate that the non-performance based compensation to be paid to the company's executive officers for fiscal 2006 will exceed that limit. The Company's 1997 Stock Plan has been structured so that any compensation deemed paid in connection with the exercise of option grants made under that plan with an exercise price equal to the fair market value of the option shares on the grant date will qualify as performance-based compensation which will not be subject to the \$1 million limitation. However, none of the service-vesting RSUs issued to the executive officers will qualify as performance-based compensation. Consequently, as the Compensation Committee continues to issue such RSUs in the future, it is likely that the total non-performance-based compensation payable to certain executive officers will exceed the \$1.0 million limit in one or more years. The Compensation Committee believes that in establishing the equity incentive compensation programs for the executive officers, the potential deductibility of the compensation payable under those programs should be only one of a number of relevant factors taken into consideration, and not the sole governing factor. For that reason the Compensation Committee may provide one or more executive officers with the opportunity to earn equity compensation through awards that may be in excess of the amount deductible by reason of Section 162(m) or other provisions of the Internal Revenue Code. Because it is unlikely that the cash compensation payable to any of the company's executive

**Table of Contents**

officers in the foreseeable future will approach the \$1 million limit, the Compensation Committee has decided at this time not to take any action to limit or restructure the elements of cash compensation payable to the executive officers. The Compensation Committee will reconsider this decision should the individual cash compensation of any executive officer ever approach the \$1 million level.

This Compensation Committee Report shall not be deemed incorporated by reference by any general statement incorporating by reference this proxy statement into any filing under the Securities Act of 1933, as amended, or under the Securities Exchange Act of 1934, as amended, except to the extent the Company specifically incorporates this report by reference, and shall not otherwise be deemed filed under such Acts.

**Compensation Committee**

David Schreiber, Chairman

Robert Whalen

---

**Table of Contents**

**AUDIT COMMITTEE REPORT**

The following is the report of the Audit Committee with respect to Nanogen's audited financial statements for the year ended December 31, 2005.

The purpose of the Audit Committee is to assist the Board in its general oversight of Nanogen's financial reporting, internal controls and audit functions. The Audit Committee is comprised solely of independent directors as defined by the listing standards of Nasdaq Stock Market, Inc.

The Audit Committee has reviewed and discussed the consolidated financial statements with management and Ernst & Young LLP, the Company's independent registered public accounting firm. Management is responsible for the preparation, presentation and integrity of Nanogen's financial statements; accounting and financial reporting principles; establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)); establishing and maintaining internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f)); evaluating the effectiveness of disclosure controls and procedures; evaluating the effectiveness of internal control over financial reporting; and evaluating any change in internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, internal control over financial reporting. Ernst & Young LLP is responsible for performing an independent audit of the consolidated financial statements and expressing an opinion on the conformity of those financial statements with accounting principles generally accepted in the United States of America, as well as expressing an opinion on (i) management's assessment of the effectiveness of internal control over financial reporting and (ii) the effectiveness of internal control over financial reporting.

During the course of 2005, management completed the documentation, testing and evaluation of Nanogen's system of internal control over financial reporting in response to the requirements set forth in Section 404 of the Sarbanes-Oxley Act of 2002 and related regulations. The Audit Committee was kept apprised of the progress of the evaluation and provided oversight and advice to management during the process. In connection with this oversight, the Committee received periodic updates provided by management and Ernst & Young LLP at each regularly scheduled Committee meeting. The Committee also held a number of special meetings to discuss issues as they arose. At the conclusion of the process, management provided the Committee with and the Committee reviewed a report on the effectiveness of the Company's internal control over financial reporting. The Committee also reviewed the report of management contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2005 filed with the SEC, as well as Ernst & Young LLP's Report of Independent Registered Public Accounting Firm included in the Company's Annual Report on Form 10-K related to its audit of (i) the consolidated financial statements and financial statement schedule, (ii) management's assessment of the effectiveness of internal control over financial reporting and (iii) the effectiveness of internal control over financial reporting. The Committee continues to oversee the Company's efforts related to its internal control over financial reporting and management's preparations for the evaluation in 2006.

The Audit Committee has discussed with Ernst & Young LLP the matters required to be discussed by Statement on Auditing Standards No. 61, as amended, Communication with Audit Committees and PCAOB Auditing Standard No. 2, An Audit of Internal Control Over Financial Reporting Performed in Conjunction with an Audit of Financial Statements. In addition, Ernst & Young LLP has provided the Audit Committee with the written disclosures and the letter required by the Independence Standards Board Standard No. 1, as amended, Independence Discussions with Audit Committees, and the Audit Committee has discussed with Ernst & Young LLP their firm's independence.

Based on their review of the consolidated financial statements and discussions with and representations from management and Ernst & Young LLP referred to above, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in Nanogen's Annual Report on Form 10-K for the year ended December 31, 2005, for filing with the Securities and Exchange Commission.

**Audit Committee**

Stelios B. Papadopoulos, Chairman

David Schreiber

Robert E. Whalen

**Table of Contents****PRINCIPAL ACCOUNTING FEES AND SERVICES**

The following table sets forth the aggregate fees billed to the Company for the annual audits for the fiscal years ended December 31, 2005 and 2004, and all other fees billed to the Company during 2005 and 2004 to its principal accounting firm, Ernst & Young LLP:

	<b>For the Years Ended December 31,</b>	
	<b>2005</b>	<b>2004</b>
	<i>(in thousands)</i>	
Audit Fees	\$ 534	\$ 583
Audit-Related Fees	103	12
Tax Fees		
All Other Fees	2	
<b>Total</b>	<b>\$ 639</b>	<b>\$ 595</b>

The Audit Committee has determined that the rendering of all non-audit services by Ernst & Young, LLP is compatible with maintaining the auditor's independence. The fees listed under "Audit Fees" above were incurred for service related to the annual audit of the Company's consolidated financial statements, reviews of interim consolidated financial statements and services that are normally provided in connection with statutory and regulatory filings and engagements. In 2005, audit fees also include fees incurred for the audits of management's assessment of the effectiveness of internal controls over financial reporting as required under the Sarbanes-Oxley regulations. The fees listed under "Audit-Related Fees" above were incurred for service related to accounting consultations and due diligence in connection with proposed acquisitions. The fees listed under "All Other Fees" above were incurred for service related to annual license fees for access to an on-line database of accounting and auditing literature. The Audit Committee approves non-audit services provided by Ernst & Young LLP on an ad hoc basis, and has vested authority with Stelios B. Papadopoulos, the chairman of the Audit Committee, to approve non-audit services as needed.

**Table of Contents****STOCK PRICE PERFORMANCE GRAPH**

The following graph shows the total stockholder return of an investment of \$100 in cash on December 31, 2000, through December 31, 2005, for (i) Nanogen's Common Stock, (ii) the Nasdaq Composite Index and (iii) Nasdaq Biotechnology Index. All values assume reinvestment of the full amount of all dividends and are calculated as of December 31 of each year. The comparisons in the graph are required by the Securities and Exchange Commission and are not intended to forecast or be indicative of possible future performance of the Company's Common Stock.

	<b>Nanogen, Inc. Index</b>	<b>Nasdaq Composite Index</b>	<b>Nasdaq Biotechnology Index</b>
12/31/00	\$ 100.000	\$ 100.000	\$ 100.000
12/31/01	\$ 64.111	\$ 78.947	\$ 83.797
12/31/02	\$ 17.222	\$ 54.058	\$ 45.813
12/31/03	\$ 100.111	\$ 81.091	\$ 66.771
12/31/04	\$ 81.778	\$ 88.056	\$ 70.863
12/31/05	\$ 29.000	\$ 89.265	\$ 72.873

**CERTAIN TRANSACTIONS**

In June 2005, we signed a letter of agreement with FasTraQ, Inc. ( FasTraQ ) for the development of certain future product. In October and December 2005 we amended this letter of agreement. In February 2006, we converted this letter of agreement into an executed contract. Our Chief Executive Officer and Chairman of the

**Table of Contents**

Board, Mr. Birndorf, is a director and an investor in FasTraQ. Mr. Birndorf abstained from the discussions and votes regarding FasTraQ at the meetings of our Board of Directors. As a result of the agreements and related amendments we made an initial non-refundable payment of \$500,000 to FasTraQ to begin the initial development of this product as well as a \$25,000 payment to purchase certain product from them. As of December 31, 2005, the full \$525,000 had been expensed.

We are also obligated to supply materials at no cost to be used in the development of this technology and pay FasTraQ up to \$500,000 based on meeting certain research milestones.

Mr. Birndorf owns an aircraft which is leased by a local charter aircraft company. We did not utilize the aircraft during 2005; however, for the year ended December 31, 2004, the Company paid approximately \$13,000 to the local charter aircraft company for the Company's use of Mr. Birndorf's aircraft for business related travel. Mr. Birndorf receives approximately \$1,500 per hour of usage when his aircraft is leased to outside parties, including the Company. Mr. Birndorf received \$5,000 for the year ended December 31, 2004 as a result of the Company's use of Mr. Birndorf's aircraft. The Board believes that the terms of the charter arrangements are no less favorable to the Company than those that could be obtained from unrelated third parties, based on review of lease fees published by other charter companies.

William Gerber was the President, Chief Executive Officer and a Director of Epoch Biosciences, Inc., a company acquired by Nanogen in December 2004. On December 15, 2004, Dr. Gerber and the Company entered into a consulting agreement pursuant to which Dr. Gerber provides consulting services to the Company from time to time, as requested by Howard Birndorf or David Ludvigson, regarding the integration of the business of Epoch and other strategic issues facing the Company. The agreement will terminate upon the earlier of (a) September 16, 2005 or (b) Dr. Gerber's election to the Board. Dr. Gerber has received no cash compensation pursuant to the consulting agreement, however, his vested options to purchase 221,968 shares of the Company's Common Stock (which were originally granted to him under Epoch's stock option plans and subsequently converted into options to purchase shares of Nanogen Common Stock pursuant to the acquisition) will remain outstanding during the duration of Dr. Gerber's service relationship with the Company, either as a non-employee Board member or pursuant to the consulting agreement. In accordance with the terms of the applicable option agreements, Dr. Gerber's options will terminate and cease to remain outstanding upon the twelve month anniversary of the termination of Dr. Gerber's service relationship with the Company. The Company believes that the value attributable to the extended period that the vested option shares remain outstanding is in excess of \$60,000.

The Company believes that the foregoing transactions were in its best interests. It is the Company's current policy that all transactions by the Company with officers, directors, and 5% stockholders or their affiliates will be entered into only if such transactions are approved by a majority of the disinterested directors, and are on terms no less favorable to the Company than could be obtained from unaffiliated parties.



---

**Table of Contents**

**PROPOSAL 2**

**APPROVAL OF THE AMENDMENT OF THE  
NANOGEN, INC. 1997 STOCK INCENTIVE PLAN**

The Company's stockholders are being asked to approve an amendment to the Company's 1997 Stock Incentive Plan (the "1997 Stock Plan") that will increase the maximum number of shares of Common Stock authorized for issuance over the term of the plan by an additional 1,500,000 shares to 11,943,011 shares. The proposed share increase will assure that a sufficient reserve of Common Stock is available under the 1997 Stock Plan to attract and retain the services of key individuals, including those from recently acquired entities, essential to the Company's long-term growth and success.

The 1997 Stock Plan was adopted by the Board of Directors and was approved by the stockholders on August 1, 1997. The 1997 Plan replaced the 1993 Stock Plan and 1995 Stock Option/Stock Issuance Plans (collectively, the "Prior Stock Plans"). On May 5, 2006, the Board of Directors approved the amendment to the 1997 Stock Plan that is the subject of this Proposal 2, subject to the approval of the Company's stockholders at the Annual Meeting.

The following is a summary of the material terms and provisions of the 1997 Stock Plan, as amended. The summary, however, does not purport to be a complete description of all the provisions of the 1997 Stock Plan. Copies of the actual plan document may be obtained by any stockholder upon written request to the Secretary of the Company at the Company's principal offices in San Diego, California.

**Description of the 1997 Stock Plan**

***Purpose***

The purpose of the 1997 Stock Plan is to promote the interests of the Company and its stockholders by encouraging key individuals to acquire shares of the Company's Common Stock or to increase their proprietary interest in the Company. By providing the opportunity to acquire shares of Common Stock or to receive other equity incentives under the 1997 Stock Plan, the Company seeks to attract and retain those key employees upon whose judgment, initiative and leadership on which the success of the Company largely depends.

***Administration and Eligibility***

The 1997 Stock Plan is administered by the Board of Directors or its delegate, currently the Compensation Committee. The Board of Directors, or its delegate, selects the employees of the Company who will receive awards, determines the size of any award and establishes any vesting or other conditions. Employees, directors, consultants and advisors of the Company (or any subsidiary of the Company) are eligible to participate in the 1997 Stock Plan, although incentive stock options may be granted only to employees. The participation of the outside directors of the Company is limited to 25% of the shares available under the 1997 Stock Plan. As of April 17, 2006, approximately 274 employees (including five executive officers), one consultant, and five non-employee board members were eligible to participate in the 1997 Stock Plan.

No individual may receive options covering more than 750,000 shares or SARs covering more than 300,000 shares in any calendar year. Stockholders approval of this proposal will also constitute a reapproval of the 750,000 share option limitation and the 300,000 SAR limitation for purposes of Internal Revenue Code Section 162(m). This limitation will assure that any deductions to which we would otherwise be entitled either upon the exercise of stock options or stock appreciation rights granted under the 1997 Stock Plan with an exercise price per share equal to the fair market value per share of our Common Stock on the grant date or upon the subsequent sale of the shares purchased under those options will not be subject to the \$1.0 million limitation on the income deductibility of compensation paid per covered executive officer imposed under Section 162(m).

---

## **Table of Contents**

The Board may at any time amend or terminate the 1997 Stock Plan, subject to the approval of the Company's stockholders to the extent required by applicable laws or regulations, including the regulations of any exchange (or the Nasdaq National Market) on which shares of the Company's Common Stock are at the time primarily traded. The termination or amendment of the plan shall not affect any award previously granted under the plan.

### ***Shares Subject to the 1997 Stock Plan***

The 1997 Stock Plan provides for awards in the form of restricted shares, stock units, options or stock appreciation rights (SARs), or any combination thereof. No payment is required upon receipt of an award, except that a recipient of newly issued restricted shares must pay at least the par value of such restricted shares to the Company.

The maximum number of shares of Common Stock which may be issued pursuant to restricted share awards, stock units, options and SARs under the 1997 Stock Plan is currently limited to 11,943,011 shares, including the 1,500,000 share increase that stockholders are being asked to approve pursuant to this Proposal 2, and including all shares added to the 1997 Stock Plan pursuant to forfeitures and terminations under the Prior Stock Plans. Should any unvested shares issued under the 1997 Stock Plan or the prior stock plans be subsequently repurchased by the Company, at the original issue price paid per share, upon the individual's cessation of service prior to vesting in those shares, then the repurchased shares will be available for subsequent award and issuance under the 1997 Stock Plan. If any stock units, options or SARs are forfeited (including awards pursuant to the Prior Stock Plans), or if any options, SARs or other stock-based awards terminate for any other reason prior to the issuance of the total number of shares subject to those awards (including awards pursuant to the Prior Stock Plans), then the unissued shares subject to those awards will again become available for issuance under the 1997 Stock Plan.

The following share counting provisions will be in effect under the 1997 Stock Plan: (i) if restricted shares are forfeited before any dividends have been paid with respect to such shares, then such shares shall again become available for subsequent award and issuance under the plan, (ii) upon the settlement of stock units, only the number of shares of Common Stock actually issued in settlement of such stock units will reduce the number of shares available for issuance under the plan, and the balance shall become available for subsequent award and issuance under the plan, and (iii) if SARs are exercised, then only the number of shares of Common Stock actually issued in settlement of such SARs shall reduce the number of shares available for issuance under the plan, and the balance shall become available for subsequent awards and issuance under the plan.

### ***Outstanding Grants***

As of April 28, 2006, the following persons or groups had received stock options to purchase in the aggregate the indicated number of shares of Common Stock under the 1997 Stock Plan: (i) the Chief Executive Officer and the other remaining current or former officers named in the Summary Compensation Table: Mr. Birndorf options for 1,987,496 shares; Mr. Ludvigson options for 846,666 shares; Dr. Respass options for 287,500 shares; Dr. Lidgard options for 362,500 shares and Mr. Saltmarsh options for 212,500; (ii) all current executive officers of the Company as a group: options for 3,696,662 shares; (iii) all current directors who are not executive officers as a group: options for 130,000 shares; (iv) the nominees for Class I, Class II and Class III directors: Mr. Birndorf options for 1,987,496 shares; Mr. Whalen options for 25,000 shares; Mr. Papadopoulos options for 55,000 shares; Mr. Schreiber options for 25,000 shares; Dr. Gerber options for 25,000 shares (Dr. Gerber's 221,968 options were issued under the Epoch Biosciences, Inc. 2003 Stock Incentive Plan and assumed by the Company); (v) each associate of any of such current directors, executive officers or nominee, options for zero shares (vi) each person who has received five percent of options granted other than those included above, zero shares and (vii) all employees (excluding executive officers) of the Company, options for 7,898,599 shares.

---

## **Table of Contents**

As of April 28, 2006, the following persons or groups had received in the aggregate the indicated number of shares of restricted stock and/or stock units under the 1997 Stock Plan: (i) the Chief Executive Officer and the other remaining current or former officers named in the Summary Compensation Table: Mr. Birndorf 100,000 shares; Mr. Ludvigson 50,000 shares; Mr. Respass 25,000 shares; Dr. Lidgard 25,000 shares and Mr. Saltmarsh 25,000, (ii) all current executive officers of the Company as a group: 225,000 shares; (iii) all current directors who are not executive officers as a group: 58,045 shares; (iv) the nominees for Class I, Class II and Class III directors: Mr. Whalen for 17,078 shares; Mr. Papadopoulos for 17,078 shares; Mr. Schreiber for 17,078 shares; Mr. Gerber for 6,811 (v) each associate of any of such current director, executive officer or nominee: zero shares; (vi) each person who has received five percent of options granted other than those included above: zero shares; and (vii) all employees (excluding executive officers) of the Company: approximately 210,706 shares.

As of April 28, 2006 options covering 6,359,372 shares of Common Stock were outstanding under the 1997 Stock Plan, 515,829 shares had been issued pursuant to restricted stock or stock unit awards, 11,943,011 shares have been issued pursuant to the exercise of outstanding options under the 1997 Stock Plan, and 1,766,939 shares remained available for future award and issuance (assuming stockholder approval of the increase which forms part of this Proposal).

On April 28, 2006, the closing price of the Company's Common Stock on the Nasdaq National Market was \$2.57 per share. For all valuation purposes under the 1997 Stock Plan the fair market value per share of Common Stock on any relevant date is the closing price per share on that date on the Nasdaq National Market.

### ***New Plan Benefits***

No awards will be granted and no shares of Common Stock will be issued under the 1997 Stock Plan on the basis of the 1,500,000 share increase to the plan unless and until stockholder approval of such increase is obtained.

### ***Restricted Stock and Restricted Stock Units***

Restricted shares are shares of Common Stock that are subject to repurchase by the Company at the employee's purchase price in the event that the applicable vesting conditions are not satisfied, and they are nontransferable prior to vesting (except for certain transfers to a trustee). A restricted share unit is a bookkeeping entry entitling the holder of the award to one share of the Company's Common Stock at a future date, generally upon the satisfaction of the applicable vesting conditions. Settlement of vested restricted share units may be made in cash, shares of Common Stock, or a combination of both, as determined by the plan administrator. Restricted shares have the same voting and dividend rights as other shares of Common Stock. Restricted share units do not carry voting rights, and may carry a right to dividend equivalents. The recipient of restricted shares or stock units may pay all projected withholding taxes relating to the award with shares of Common Stock rather than cash if permitted by the Compensation Committee.

### ***Options***

Options may include nonstatutory stock options ( NSOs ) as well as incentive stock options ( ISOs ) intended to qualify for special tax treatment. An option may provide that a new option will be granted automatically to the optionee when he or she exercises such option. Options may also be granted in combination with SARs. NSOs may also be awarded in combination with Restricted Shares or Stock Units. No individual may receive in any one calendar year options to purchase more than an aggregate of 750,000 shares of Common Stock.

The term of an ISO cannot exceed 10 years (five years for 10% stockholders), and the exercise price of an ISO must be at least equal to the fair market value of the Common Stock on the date of grant (or 110% of fair market value at the date of grant for 10% stockholders). The term of an NSO shall be determined at the time the option is granted, and the exercise price of an NSO may be less than, equal to or greater than the fair market value of the Common Stock on the date of grant.

---

## **Table of Contents**

The exercise price of an option may be paid in any lawful form permitted by the Board of Directors or its delegate, including (without limitation) the delivery of shares of Common Stock owned the optionee for the requisite period necessary to avoid a compensation expense to the Company for financial reporting purposes upon their delivery. The Board of Directors or its delegate may likewise permit optionees to satisfy their withholding tax obligation upon exercise of an NSO by surrendering a portion of their option shares to the Company. The 1997 Stock Plan also allows the optionee to pay the exercise price of an option by giving exercise/sale or exercise/pledge directions.

### ***Stock Appreciation Rights***

A SAR permits the participant to elect to receive any appreciation in the value of the underlying stock from the Company, either in shares of Common Stock or in cash or a combination of the two, with the Board of Directors or its delegate having the discretion to determine the form in which such payment will be made. The amount payable on exercise of a SAR is measured by the excess of the market value of the underlying stock at exercise over the exercise price. SARs may, but need not, be granted in conjunction with options. Upon exercise of a SAR granted in tandem with an option, the corresponding portion of the related option will be cancelled and cannot thereafter be exercised. Conversely, upon exercise of an option to which a SAR is attached, the SAR will be cancelled and will no longer be exercised to the extent that the corresponding option has been exercised. Unless otherwise permitted by the Board of Directors or its delegate, all options and SARs are nontransferable prior to the optionee's death.

### ***Vesting***

The Board of Directors or its delegate determines the number of restricted shares, stock units, options or SARs to be included in the award as well as the vesting and other conditions. The vesting conditions may be based on the employee's service, his or her individual performance, the Company's performance or other appropriate criteria. In general, the vesting conditions will be based on the employee's service after the date of grant. Vesting may be accelerated in the event of the employee's death, disability or retirement or in the event of a change in control with respect to the Company. The Board of Directors has in the past granted and may in the future grant options which provide for mandatory acceleration of vesting in the event of a change in control.

### ***Other Provisions***

For purposes of the 1997 Stock Plan, the term "change in control" is defined as any one of the following: (i) any person is or becomes the beneficial owner, directly or indirectly, of at least 50% of the combined voting power of the Company's outstanding securities ordinarily having the right to vote at elections of directors; (ii) upon a merger or consolidation of the Company with or into another corporation or entity or any other corporate reorganization in which over 50% of the combined voting power of the continuing or surviving entity immediately after the merger, consolidation or reorganization is owned by persons who were not stockholders of the Company immediately prior to the merger, consolidation or reorganization; or (iii) a change in the composition of the Board of Directors as a result of which fewer than half of the incumbent Directors are Directors who either (a) had been Directors 24 months prior to the change or (b) were elected or nominated with the affirmative votes of at least a majority of the Directors who had been Directors of the Company 24 months prior to the change and who were still in office at the time of the election or nomination.

In the event any payment or benefit provided under the 1997 Stock Plan to any individual would subject that individual to the excise tax imposed by Section 4999 of the Code relating to excess parachute payments, then such individual will be entitled to receive an additional payment from the Company in an amount equal to the amount of the excise tax imposed on such payment or benefit, together with any interest and penalties (a Gross-Up Payment) plus the income taxes and additional excise tax imposed on the Gross-Up Payment.

On April 26, 2002, the Board of Directors amended the 1997 Stock Plan by removing the provision of the Plan permitting the Company to reprice options under the Plan without stockholder approval. The 1997 Stock Plan now requires that the Company can only reprice options with the consent of the Company's stockholders.

## **Table of Contents**

Members of the Company's Board of Directors who are not employees of the Company are eligible for awards under the 1997 Stock Plan. However, such outside directors are not eligible for ISO grants. Total shares available to outside directors is limited to 25% of total shares available under the 1997 Stock Plan. Non-employee board members may elect to receive his or her annual retainer payment and/or meeting fees from the Company in the form of NSOs, restricted shares or restricted share units or a combination thereof, as determined by the plan administrator.

### **Federal Income Tax Consequences**

The following discussion of the federal income tax consequences of the 1997 Stock Plan as it relates to share awards, nonqualified stock options and incentive stock options is intended to be a summary of applicable federal law. State and local tax consequences may differ.

#### ***Direct Stock Issuances***

If a participant is awarded or purchases shares, the amount by which the fair market value of the shares of Common Stock on the date of award or purchase exceeds the amount paid for the shares of Common Stock will be taxed to the participant as ordinary income. The Company will be entitled to a deduction in the same amount. The participant's tax basis in the shares acquired is equal to the share's fair market value on the date of acquisition. Upon a subsequent sale of any shares of Common Stock, the participant will realize capital gain or loss (long-term or short-term, depending upon the period the shares of Common Stock were held for more than one year before the sale) in an amount equal to the difference between his or her basis in the shares and the sale price.

If a participant is awarded or purchases shares of Common Stock that are subject to a vesting schedule, the participant is deemed to receive an amount of ordinary income equal to the excess of the fair market value of the shares at the time those shares vest over the amount (if any) paid for such shares by the participant. The Company is entitled to a deduction equal to the amount of the income recognized by the participant.

Code Section 83(b) permits a participant to elect, within 30 days after the transfer of any shares subject to a vesting schedule to him or her, to be taxed at ordinary income rates on the excess of the fair market value of the shares at the time of the transfer over the amount (if any) paid by the participant for such shares. Withholding taxes will be collected at that time. If the participant makes a Section 83(b) election, any later appreciation in the value of the shares of Common Stock is not taxed as ordinary income, but instead is taxed as capital gain when the shares of Common Stock are sold or transferred.

#### ***Stock Appreciation Rights***

No taxable income is recognized upon the participant's receipt of a stock appreciation right. The holder will recognize ordinary income in the year in which the stock appreciation right is exercised, in an amount equal to the excess of the fair market value of the underlying shares of common stock on the exercise date over the base price in effect for the exercised right, and the Company will be required to collect the withholding taxes applicable to such income from the holder.

#### ***Restricted Stock Units***

No taxable income is recognized upon the participant's receipt of a restricted stock unit. The holder will recognize ordinary income in the year in which the shares subject to that unit are actually issued to the holder. The amount of that income will be equal to the fair market value of the shares on the date of issuance, and the Company will be required to collect the withholding taxes applicable to such income from the holder.

The Company will be entitled to an income tax deduction equal to the amount of ordinary income recognized by the holder at the time the shares are issued. The deduction will be allowed for the taxable year in which such ordinary income is recognized.

---

**Table of Contents**

***Options***

Incentive stock options and nonqualified stock options are treated differently for federal income tax purposes. Incentive stock options are intended to comply with the requirements of Section 422 of the Code. Nonqualified stock options need not comply with such requirements.

An optionee generally does not recognize any taxable income for regular income tax purposes upon the grant or exercise of an incentive stock option. However, the amount by which the fair market value of the shares on the exercise date exceeds the exercise price paid for those shares will be includable in the optionee's income for alternative minimum tax purposes. If an optionee holds the shares acquired upon the exercise of an incentive stock option for at least two years following grant and at least one year following exercise, the optionee's gain, if any, upon a subsequent disposition of such shares is a capital gain (or loss). The measure of the gain is equal to the excess of the proceeds received on disposition over the optionee's basis in the shares (which generally equals the exercise price). If an optionee disposes of stock acquired pursuant to exercise of an incentive stock option before satisfying the one and two-year holding periods described above, the optionee will recognize both ordinary income and capital gain (or loss) in the year of disposition. The amount of the ordinary income will be the lesser of (i) the amount realized on disposition less the optionee's adjusted basis in the stock (usually the exercise price) or (ii) the excess of the fair market value of the shares on the exercise date over the exercise price paid for those shares. The balance of the consideration received on such a disposition will be capital gain, which will be long term if the shares are held for at least one year following exercise of the incentive stock option. The Company is not entitled to an income tax deduction on the grant or exercise of an incentive stock option or on the optionee's disposition of the shares after satisfying the holding period requirement described above. If the holding periods are not satisfied, the Company will be entitled to a deduction in the year the optionee disposes of the shares, in an amount equal to the ordinary income recognized by the optionee.

An optionee is not taxed on the grant of a nonqualified stock option. On exercise, however, the optionee recognizes ordinary income equal to the amount by which the fair market value of the purchased shares on the date of exercise exceed the exercise price paid for those shares. The Company is entitled to an income tax deduction in the year of exercise in the amount recognized by the optionee as ordinary income. Any gain on subsequent disposition of the shares is a capital gain, which will be long term if the shares are held for at least one year following exercise. The Company does not receive a deduction for this capital gain.

***Deductibility of Executive Compensation.***

The Company anticipates that any compensation deemed paid by the Company in connection with the disqualifying disposition of incentive stock option shares and the exercise of non-statutory options granted with an exercise price equal to the fair market value of the Company's common stock on the option grant date or stock appreciation rights will qualify as performance-based compensation for purposes of Internal Revenue Code Section 162(m) and will not have to be taken into account for purposes of the \$1 million limitation per covered individual on the deductibility of the compensation paid to certain of our executive officers.

Accordingly, the compensation deemed paid with respect to options granted with an exercise price equal to the fair market value of the Company's common stock on the option grant date and stock appreciation rights granted under the 1997 Plan will remain deductible by us without limitation under Section 162(m). However, any compensation deemed paid by us in connection with shares issued under 1997 Plan as restricted stock or restricted stock units, or pursuant to options with an exercise price less than the fair market value of the Company's common stock on the option grant date will be subject to the \$1 million limitation.

Any gross-up payment, together with the associated taxes, interest and penalties, made by the Company will not be deductible.

## **Table of Contents**

### **Accounting Treatment**

Pursuant to the accounting standards established by Statement of Financial Accounting Standards No. 123R, Share-Based Payment, or SFAS 123R, the Company is required to recognize all share-based payments, including grants of stock options, RSUs and employee stock purchase rights, in our financial statements effective January 1, 2006. Accordingly, stock options that are granted to our employees and non-employee Board members will have to be valued at fair value as of the grant date under an appropriate valuation formula, and that value will have to be charged as stock-based compensation expense against our reported GAAP earnings over the designated vesting period of the award. Similar option expensing will be required for any unvested options outstanding on January 1, 2006, with the grant date fair value of those unvested options to be expensed against our reported earnings over the remaining vesting period. For shares issuable upon the vesting of RSUs awarded under the 1997 Plan, we will be required to expense over the vesting period a compensation cost equal to the fair market value of the underlying shares on the date of the award. If any other shares are unvested at the time of their direct issuance, the fair market value of those shares at that time will be charged to our reported earnings ratably over the vesting period. Such accounting treatment for RSUs and direct stock issuances will be applicable whether vesting is tied to service periods or performance goals. The issuance of a fully-vested stock bonus will result in an immediate charge to our earnings equal to the fair market value of the bonus shares on the issuance date.

Stock options and stock appreciation rights granted to non-employee consultants will result in a direct charge to our reported earnings based on the fair value of the grant measured on the vesting date of each installment of the underlying shares. Accordingly, such charge will take into account the appreciation in the fair value of the grant over the period between the grant date and the vesting date of each installment comprising that grant.

### **Required Vote**

The affirmative vote of a majority of our outstanding voting shares present or represented and entitled to vote at the Annual Meeting, is required for approval of the amended and restated 1997 Plan. Should such stockholder approval not be obtained, then the proposed 1,500,000 share increase to the share reserve under the 1997 Plan will not be implemented. The 1997 Plan will, however, continue in effect, and option grants, SARs, direct stock issuances and other stock-based awards will continue to be made under the 1997 Plan as currently in effect until all the shares currently available for award and issuance under the 1997 Plan have been issued pursuant to such awards.

**The Board of Directors recommends a vote FOR the adoption of the amendment  
of the Nanogen, Inc. 1997 Stock Incentive Plan.**

**Table of Contents**

**PROPOSAL 3**

**APPROVAL OF THE AMENDMENT OF THE**

**NANOGEN, INC. EMPLOYEE STOCK PURCHASE PLAN**

The Company's stockholders are being asked to approve an amendment to the Company's Employee Stock Purchase Plan (the "Purchase Plan") which will increase the maximum number of shares of Common Stock authorized for issuance over the term of the Purchase Plan by an additional 500,000 shares from 600,000 shares to 1,100,000 shares. The purpose of the share increase is to ensure that the Company will continue to have a sufficient reserve of Common Stock available under the Purchase Plan to provide eligible employees of the Company and its participating subsidiaries with the opportunity to acquire a proprietary interest in the Company through participation in a payroll-deduction based employee stock purchase plan under Section 423 of the Internal Revenue Code of 1986, as amended (the "Code").

The Purchase Plan was adopted by the Board of Directors in November 1997 and became effective in April 1998 in connection with the initial public offering of the Company's Common Stock. On May 5, 2006, the Board of Directors adopted the amendment to the Purchase Plan which is the subject of this Proposal 3, subject to the approval of the Company's stockholders.

The following is a summary of the material terms and provisions of the Purchase Plan. The summary, however, does not purport to be a complete description of all the provisions of the Purchase Plan. Copies of the actual plan document may be obtained by any stockholder upon written request to the Secretary of the Company at the corporate offices in San Diego, California.

**Description of the Purchase Plan**

***Purpose***

The purpose of the Purchase Plan is to provide a means by which eligible employees of the Company or its subsidiaries may be given an opportunity to purchase shares of the Company's Common Stock at a discount to the market price. The Company, by means of the Purchase Plan, seeks to attract and retain key employees, and to provide incentives for employees to exert maximum efforts for the success of the Company.

***Administration***

The Purchase Plan currently administered by the Compensation Committee of the Board of Directors. In its capacity as plan administrator, the Compensation Committee has the final power to construe and interpret the Purchase Plan and the rights granted under it and has full authority, subject to the provisions of the Purchase Plan, to determine when and how rights to purchase stock of the Company will be granted, the provisions of each offering of such rights and whether any subsidiary of the Company will be eligible to participate in the Purchase Plan. For purposes of the Purchase Plan, subsidiary will have the meaning as set forth in Section 424 of the Code.

***Stock Subject to the Purchase Plan***

Currently, the total number of shares of Common Stock that may be sold pursuant to the Purchase Plan may not exceed 600,000 shares, subject to adjustment as described below. The proposed amendment to the Purchase Plan would increase the number of shares of Common Stock that may be sold under the Purchase Plan from 600,000 to 1,100,000. If rights granted under the Purchase Plan terminate without having been exercised, the Common Stock not purchased will become available again for issuance under the Purchase Plan.

As of April 28, 2006, 586,268 shares of the Company's Common Stock have been sold under the Purchase Plan and 13,732 shares of Common Stock remain available for purchase under the Purchase Plan.

As of April 28, 2006 the fair market value of a share of the Company's Common Stock was \$2.57.



---

## **Table of Contents**

### ***Eligibility***

Any employee who has been employed by the Company or by any subsidiary participating in the Purchase Plan on the day preceding an offering period for at least one month and who is customarily employed on a basis requiring at least 20 hours of service per week for at least five months per year is eligible to participate in the Purchase Plan. As of April 17, 2006, the Company had approximately 274 employees who were eligible to participate in the Purchase Plan, including five executive officers.

No rights to purchase shares of Common Stock may be granted under the Purchase Plan to any person who, at the time of grant, owns (or is deemed to own) stock possessing more than 5% or more of the total combined voting power or value of all classes of stock of the Company or any subsidiary. In addition, an eligible employee will not be granted rights to purchase Common Stock under the Purchase Plan and other employee stock purchase plans of any parent or subsidiary of the Company that, in the aggregate, accrue at a rate that exceeds \$25,000 of the fair market value of the stock (determined at the time such rights are granted) for each calendar year such rights are outstanding. No participant may purchase more than a maximum of 1,666 shares of the Company's Common Stock during any accumulation period. The plan administrator may exclude from participation in one or more offerings under the Purchase Plan certain employees of the Company who are highly compensated employees within the meaning of Section 423(b)(4)(D) of the Code.

### ***Offerings***

Shares of Common Stock are offered under the Purchase Plan through a series of successive offering periods, each with a maximum duration of twenty-four months. Two overlapping offering periods commence in each calendar year on each January 1 and July 1. Once an eligible employee is enrolled in the Purchase Plan, such offering period will continue to apply to him or her until the earliest of (1) the end of such 24 month offering period, (2) the end of his or her participation in the Purchase Plan, or (3) his or her re-enrollment in a subsequent offering period as described below. If the fair market value of the Company's Common Stock on the last trading day before the commencement of the offering period is higher than on the last trading day before the commencement of any subsequent offering period, the participant will automatically be re-enrolled in such subsequent offering period. When a participant reaches the end of an offering period, but his or her participation is to continue, then such eligible employee shall automatically be re-enrolled for the offering period that commences after the end of the prior offering period. The Board may specify a maximum number of shares that may be purchased by all eligible employees in an offering.

At the time the participant joins the offering period, he or she will be granted a purchase right to acquire shares of Common Stock at semi-annual intervals over the remainder of the offering period. The six month semi-annual intervals begin on January 1 and July 1 each year, and are referred to herein as accumulation periods. Purchase dates occur on the last business day of each accumulation period.

### ***Terms of Rights***

The following is a summary description of the terms of rights under the Purchase Plan.

*Participation.* An eligible employee may participate in an offering by delivering an enrollment form to the Company. The enrollment form authorizes payroll deductions of not less than 1% and not more than 15% of the employee's earnings during the purchase period.

*Purchase Price.* The purchase price of each share of Common Stock acquired under the Purchase Plan is equal to 85% of the lower of the fair market value of the Common Stock at either the last trading day preceding the commencement of the applicable offering period or the last day of the applicable accumulation period. Under the Purchase Plan, the fair market value of a share of Common Stock is the closing price for which the Common Stock was sold on the Nasdaq National Market on the relevant trading day described above.

---

**Table of Contents**

*Payment of Purchase Price; Payroll Deduction.* The purchase price payable for the shares of Common Stock is accumulated during each accumulation period through payroll deductions, on each payday during the eligible employee's participation in the Purchase Plan. A participant may change the rate of his or her payroll deductions by filing a new enrollment form with the Company not later than one week prior to the last working day prior to the commencement of the accumulation period for which such change is to be effective. If an eligible employee wishes to discontinue employee contributions entirely, he or she may do so by filing a new enrollment form at any time. Payroll withholding will cease as soon as reasonably practicable after such form has been received by the Company. All payroll deductions made for a participant are credited to his or her plan account under the Purchase Plan and deposited with the general funds of the Company. No interest is credited on any funds deposited in any participant's plan account. An eligible employee may not make any additional payments into his or her plan account.

*Purchase of Stock.* In connection with offerings made under the Purchase Plan, the plan administrator may specify a maximum number of shares any employee may purchase and a maximum aggregate number of shares that may be purchased in the offering by all eligible employees. Notwithstanding the foregoing, no participant may purchase more than a maximum of 1,666 shares of Common Stock with respect to any accumulation period. If the aggregate number of shares to be purchased upon exercise of rights granted in the offering would exceed the maximum aggregate number of shares that may be purchased, as designated by the plan administrator, the plan administrator may make a pro rata allocation of shares available in a uniform and equitable manner. Unless the employee's participation is discontinued, his or her right to purchase shares is exercised automatically at the end of the purchase period at the applicable price.

*Withdrawal.* A participant may elect to withdraw from the Purchase Plan by filing the prescribed form with the Company at any time before the last day of the accumulation period. As soon as reasonably practicable thereafter, payroll deductions will cease and the entire amount will be credited to the eligible employee's plan account in cash, without interest. No partial withdrawals are permitted. Upon such withdrawal, the employee will not be able to rejoin the offering period and must wait until the start of a new offering period to resume participation in the Purchase Plan.

*Termination of Employment.* Rights granted pursuant to any offering under the Purchase Plan terminate immediately upon cessation of an employee's employment for any reason and the Company will distribute to such employee or such employee's named beneficiary all of his or her accumulated payroll deductions without interest.

*Restrictions on Transfer.* Rights granted under the Purchase Plan may not be transferred and may be exercised only by the person to whom such rights are granted.

**Effects of Certain Corporate Events**

The aggregate number of shares of Common Stock offered under the Purchase Plan, the limitation on the maximum number of shares of Common Stock that may be purchased by a participant during any one accumulation period, in total by all participants, and the purchase price of shares of Common Stock that any eligible employee has elected to purchase will be adjusted proportionately by the plan administrator for any increase or decrease in the number of outstanding shares of Common Stock resulting from a subdivision or consolidation of, the payment of a stock dividend, any other increase or decrease in such shares effected without receipt or payment of consideration by the Company or the distribution of the shares of a subsidiary to the Company's stockholders.

In the event of a dissolution or liquidation of the Company, or a merger or consolidation to which the Company is a constituent corporation, the Purchase Plan will terminate unless the plan of merger, consolidation or reorganization provides otherwise, and all amounts that have been withheld but not yet applied to purchase Common Stock under the Purchase Plan will be refunded, without interest. The Purchase Plan will in no event be construed to restrict in any way the Company's right to undertake a dissolution, liquidation, merger, consolidation or other reorganization.

**Table of Contents****Stock Issuances**

The table below shows, as to each of the Company's executive officers named in the Summary Compensation Table of this Proxy Statement and the various indicated individuals and groups, the number of share of Common Stock purchased under the Purchase Plan between the April 13, 1998 effective date of the Purchase Plan and the December 31, 2005 purchase date.

**Purchase Plan Transactions**

<b>Name</b>	<b>Title</b>	<b>Number of Purchased Shares</b>
Howard C. Birndorf	Chairman and Chief Executive Officer	
David G. Ludvigson	President and Chief Operating Officer	8,330
Robert Saltmarsh	Chief Financial Officer	3,332
Graham Lidgard	Senior Vice President, Research and Development	2,929
William L. Respass	Senior Vice President, General Counsel, Secretary	
All current executive officers as a group (5 persons)		14,591
All employees, including current officers who are not executive officers, as a group (269 persons)		571,677

**New Plan Benefits**

No purchase rights will be granted and no shares of Common Stock will be issued under the Purchase Plan on the basis of the 500,000 share increase for which stockholder approval is sought under this Proposal 3, unless such stockholder approval is obtained.

**Duration, Amendment and Termination**

The Board has the right to amend, suspend or terminate the Purchase Plan at any time and without notice. The Purchase Plan may also be amended or terminated immediately upon action by the Board should the financial accounting rules currently applicable to employee stock purchase plans such as the Purchase Plan be revised so as to require the Company to recognize compensation cost in connection with the shares offered for purchase under the Purchase Plan. Except for antidilution adjustments and reorganizations described above, any increase in the aggregate number of shares of Common Stock to be issued under the Purchase Plan will be subject to approval by a vote of the stockholders of the Company. In addition, any other amendment of the Purchase Plan will be subject to approval by a vote of the stockholders of the Company to the extent required by applicable law or regulation.

**Federal Income Tax Consequences**

The Company intends that a right to purchase stock of the Company granted under the Purchase Plan be considered issued under an employee stock purchase plan as that term is defined in Section 423(b) of the Code.

The following summarizes the Federal income tax consequences of an employee's participation in the Purchase Plan and is not intended to be a complete description of the tax consequences. This summary does not address Federal employment taxes, foreign, state and local income taxes and other taxes that may be applicable.

**Table of Contents**

*Grant of Option; Exercise of Option (Purchase of Stock).* An eligible employee will not recognize taxable income on the date the employee is granted an option under the Purchase Plan (i. e., the first day of the offering period). In addition, the employee will not recognize taxable income on the date the option is exercised (i.e., the date the shares are purchased under the Purchase Plan, generally the last day of an accumulation period).

*Sale of Common Stock After the Holding Period.* If an employee does not sell or otherwise dispose of the shares of Common Stock purchased upon exercise of his or her option under the Purchase Plan within two years after the date on which the option is granted or within one year after the date on which the shares of Common Stock are purchased (the Holding Period ), or if the employee dies while owning the shares of Common Stock, the employee will be taxed in the year in which he or she sells or disposes of the shares of Common Stock, or the year closing with his or her death, whichever applies, as follows:

The employee will recognize ordinary income in an amount equal to the lesser of:

The excess, if any, of the fair market value of the shares of Common Stock on the date on which such shares are sold or otherwise disposed, or the date on which the employee died, over the amount paid for the shares of Common Stock, or

The excess of the fair market value of the shares of Common Stock on the date the option was granted over the option price (determined assuming that the option was exercised on the date granted) for such shares of Common Stock; and

The employee will recognize as capital gain any further gain realized (after increasing the tax basis in the shares of Common Stock by the amount of ordinary income recognized as described above).

*Sale of Common Stock During the Holding Period.* If the employee sells or otherwise disposes of the shares of the Common Stock purchased upon exercise of his or her option under the Purchase Plan before the Holding Period expires, and the amount realized is greater than or equal to the fair market value of the shares of Common Stock on the date of exercise, the employee will be taxed in the year in which he or she sells or disposes of the shares of Common Stock as follows:

The employee will recognize ordinary income to the extent of the excess of the fair market value of the shares of Common Stock on the date on which the option was exercised over the option price for such shares of Common Stock; and

The employee will recognize as capital gain any further gain realized (after increasing the tax basis in the shares of Common Stock by the amount of ordinary income recognized as described above).

If the employee sells or otherwise disposes of the shares of Common Stock before the Holding Period expires, and the amount realized is less than the fair market value of the shares of Common Stock on the date of exercise, the employee will be taxed in the year in which he or she sells or disposes of the shares of Common Stock as follows:

The employee will recognize ordinary income to the extent of the excess of the fair market value of the shares of Common Stock on the date on which the option was exercised over the option price for such shares of Common Stock; and

The employee will recognize capital loss to the extent the fair market value of the shares of Common Stock on the date of exercise exceeds the amount realized on the sale or other disposition.

*Company Tax Deduction.* If a participant sells or otherwise disposes of the purchased shares within the Holding Period, the Company will be entitled to a tax deduction for the taxable year in which such disposition occurs, equal in amount to the amount by which the fair market value of the purchased shares on the purchase date exceed the purchase price paid for those shares. If the participant sells or otherwise disposes of the

purchased shares after the Holding Period the Company will not be entitled to an income tax deduction with respect to such disposition.

**Table of Contents**

**Accounting Treatment**

Pursuant to the accounting standards established by Statement of Financial Accounting Standards No. 123R, Share-Based Payment, or SFAS 123R, the fair value of each purchase right which is granted or vests under the Purchase Plan after December 31, 2005 will be charged as a direct compensation expense to our reported earnings over the offering period to which that purchase right pertains. The fair value of each such purchase right will be determined as of its grant date.

**Required Vote**

The affirmative vote of a majority of our outstanding voting shares present or represented and entitled to vote at the Annual Meeting is required for approval of the amendment of the Purchase Plan. Should such stockholder approval not be obtained, then the proposed 500,000 share increase to the share reserve under the Purchase Plan will not be implemented. The Purchase Plan will, however, continue in effect, and stock purchased made thereunder will continue to be made under the Purchase Plan as currently in effect until all the shares available for under the Purchase Plan have been purchased.

**The Board of Directors recommends a vote FOR the adoption of the amendment  
of the Nanogen, Inc. Employee Stock Purchase Plan.**

**Table of Contents**

**PROPOSAL 4**

**RATIFICATION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Audit Committee has appointed the firm of Ernst & Young LLP ( Ernst & Young ) as the Company s independent registered public accounting firm for the fiscal year ending December 31, 2006. Stockholder ratification of the appointment is not required under the laws of the State of Delaware, but the Audit Committee and the Board of Directors have decided to ascertain the position of the stockholders on the appointment. The Audit Committee will reconsider the appointment if the appointment is not ratified. Representatives of Ernst & Young are expected to be present at the Company s Annual Meeting. They will have an opportunity to make a statement, if they desire to do so, and will be available to respond to appropriate questions.

**Audit and Non-Audit Services Pre-Approval Policy and Procedures**

The Audit Committee has established a policy for the pre-approval of all audit and permitted non-audit services of Ernst & Young. The policy sets forth the procedures and conditions for such pre-approval of services to be performed by the independent auditor. The policy utilizes a framework of general pre-approval for certain specified services and specific approval for all other services. Pursuant to its pre-approval policy, the Audit Committee has also delegated authority to pre-approve services to be performed by Ernst & Young to the Chairman of the Audit Committee, provided that the Chairman of the Audit Committee then reports his pre-approval to the other members of the Audit Committee at the next Audit Committee meeting.

**The Board of Directors recommends a vote FOR ratification**

**of the appointment of Ernst & Young LLP.**

---

**Table of Contents**

**STOCKHOLDER PROPOSALS**

Proposals of stockholders submitted pursuant to Rule 14a-8 under the Securities and Exchange Act of 1934, as amended (the Exchange Act ) and intended to be presented for consideration at the Company s 2007 annual meeting of stockholders must be received by the Secretary of the Company at the Company s principal executive offices at 10398 Pacific Center Court, San Diego, California 92121 not later than January 4, 2007 in order to be considered for inclusion in the Company s proxy materials for that meeting.

The Company s bylaws also establish an advance notice procedure with respect to certain stockholder proposals and director nominations. If a stockholder wishes to have a stockholder proposal considered at the Company s 2007 annual meeting of stockholders, the stockholder must give timely notice of the proposal in writing to the Secretary of the Company at the Company s principal executive offices at 10398 Pacific Center Court, San Diego, California 92121. To be timely, a stockholder s notice of the proposal must be delivered or mailed and received at the executive offices of the Company not less than 50 days nor more than 75 days prior to the proposed date of the annual meeting; provided, however, that if less than 65 days notice or prior public disclosure of the date of the annual meeting is given or made to stockholders, notice of the stockholder proposal to be timely must be received no later than the earlier of (a) the close of business on the 15th day following the day on which the Company s notice of the date of the annual meeting is mailed or public disclosure of the meeting date is given, whichever first occurs, and (b) two days prior to the date of the scheduled meeting.

**HOUSEHOLDING OF PROXY MATERIALS**

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for proxy statements and annual reports with respect to two or more stockholders sharing the same address by delivering a single proxy statement addressed to those stockholders. This process, which is commonly referred to as householding, potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are our stockholders will be householding the proxy materials. A single proxy statement will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be householding communications to your address, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement and annual report, you may (1) notify your broker, (2) direct your written request to the Secretary of Nanogen at Nanogen s principal executive offices at 10398 Pacific Center Court, San Diego, California 92121, or (3) contact Nanogen directly at 1-877-626-6436. Stockholders who currently receive multiple copies of the proxy statement at their address and would like to request householding of their communications should contact their broker. In addition, Nanogen will promptly deliver, upon written or oral request at the address or telephone number above, a separate copy of the annual report and proxy statement to a stockholder at a shared address to which a single copy of the documents was delivered.

**SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE**

Under Section 16(a) of the Exchange Act, the Company s directors, executive officers, and any persons holding more than 10% of the Company s Common Stock are required to report their initial ownership of the Company s Common Stock and any subsequent changes in that ownership to the Securities and Exchange Commission. Each director, executive officer and greater than 10% stockholder is required by SEC regulations to furnish the Company with copies of all Section 16(a) forms he files. Based solely on a review of copies of such reports furnished to us and written representations that no other reports were required during the fiscal year ended December 31, 2005, we believe that all of the Company s directors and executive officers filed the required reports on a timely basis with the SEC.



**Table of Contents**

**OTHER MATTERS**

The Board of Directors knows of no other business that will be presented at the Annual Meeting. If any other business is properly brought before the Annual Meeting, it is intended that proxies in the enclosed form will be voted in accordance with the judgment of the persons voting the proxies.

Any stockholder or stockholder's representative who, because of a disability, may need special assistance or accommodation to allow him or her to participate at the Annual Meeting may request reasonable assistance or accommodation from the Company by contacting Nanogen, Inc., 10398 Pacific Center Court, San Diego, California 92121, (858) 410-4600. To provide the Company sufficient time to arrange for reasonable assistance or accommodation, please submit all requests by May 28, 2006.

Whether you intend to be present at the Annual Meeting or not, we urge you to return your signed proxy card promptly.

By order of the Board of Directors

**William L. Respass, Esq.**

*Senior Vice President,*

*General Counsel and Secretary*

**Table of Contents****APPENDIX A**

**AMENDED AND RESTATED**  
**1997 STOCK INCENTIVE PLAN OF**  
**NANOGEN, INC.**

ARTICLE 1.	<u>INTRODUCTION</u>	A-1
ARTICLE 2.	<u>ADMINISTRATION</u>	A-1
2.1	<u>Committee Composition</u>	A-1
2.2	<u>Committee Responsibilities</u>	A-1
ARTICLE 3.	<u>SHARES AVAILABLE FOR GRANTS</u>	A-2
3.1	<u>Basic Limitation</u>	A-2
3.2	<u>Additional Shares</u>	A-2
3.3	<u>Dividend Equivalents</u>	A-2
ARTICLE 4.	<u>ELIGIBILITY</u>	A-2
4.1	<u>General Rules</u>	A-2
4.2	<u>Outside Directors</u>	A-2
4.3	<u>Incentive Stock Options</u>	A-2
ARTICLE 5.	<u>OPTIONS</u>	A-2
5.1	<u>Stock Option Agreement</u>	A-2
5.2	<u>Number of Shares</u>	A-3
5.3	<u>Exercise Price</u>	A-3
5.4	<u>Exercisability and Term</u>	A-3
5.5	<u>Effect of Change in Control</u>	A-3
5.6	<u>Modification or Assumption of Options</u>	A-3
5.7	<u>Other Requirements Prior to Company's Initial Public Offering</u>	A-3
ARTICLE 6.	<u>PAYMENT FOR OPTION SHARES</u>	A-4
6.1	<u>General Rule</u>	A-4
6.2	<u>Surrender of Stock</u>	A-4
6.3	<u>Exercise/Sale</u>	A-4
6.4	<u>Exercise/Pledge</u>	A-4
6.5	<u>Promissory Note</u>	A-4
6.6	<u>Other Forms of Payment</u>	A-4
ARTICLE 7.	<u>STOCK APPRECIATION RIGHTS</u>	A-4
7.1	<u>SAR Agreement</u>	A-4
7.2	<u>Number of Shares</u>	A-4
7.3	<u>Exercise Price</u>	A-4
7.4	<u>Exercisability and Term</u>	A-4
7.5	<u>Effect of Change in Control</u>	A-5
7.6	<u>Exercise of SARs</u>	A-5
7.7	<u>Modification or Assumption of SARs</u>	A-5
ARTICLE 8.	<u>RESTRICTED SHARES AND STOCK UNITS</u>	A-5
8.1	<u>Time, Amount and Form of Awards</u>	A-5
8.2	<u>Payment for Awards</u>	A-5
8.3	<u>Vesting Conditions</u>	A-5
8.4	<u>Form and Time of Settlement of Stock Units</u>	A-5
8.5	<u>Death of Recipient</u>	A-6
8.6	<u>Creditors' Rights</u>	A-6



**Table of Contents**

ARTICLE 9.	<u>VOTING AND DIVIDEND RIGHTS</u>	A-6
9.1	<u>Restricted Shares</u>	A-6
9.2	<u>Stock Units</u>	A-6
ARTICLE 10.	<u>PROTECTION AGAINST DILUTION</u>	A-6
10.1	<u>Adjustments</u>	A-6
10.2	<u>Reorganizations</u>	A-6
ARTICLE 11.	<u>AWARDS UNDER OTHER PLANS</u>	A-7
ARTICLE 12.	<u>PAYMENT OF DIRECTOR'S FEES IN SECURITIES</u>	A-7
12.1	<u>Effective Date</u>	A-7
12.2	<u>Elections to Receive NSOs, Restricted Shares or Stock Units</u>	A-7
12.3	<u>Number and Terms of NSOs, Restricted Shares or Stock Units</u>	A-7
ARTICLE 13.	<u>LIMITATION ON RIGHTS</u>	A-7
13.1	<u>Retention Rights</u>	A-7
13.2	<u>Stockholders' Rights</u>	A-7
13.3	<u>Regulatory Requirements</u>	A-7
ARTICLE 14.	<u>LIMITATION ON PAYMENTS</u>	A-7
14.1	<u>Gross-Up Payment</u>	A-7
14.2	<u>Determination by Accountant</u>	A-8
14.3	<u>Underpayments and Overpayments</u>	A-8
14.4	<u>Related Corporations</u>	A-8
ARTICLE 15.	<u>WITHHOLDING TAXES</u>	A-8
15.1	<u>General</u>	A-8
15.2	<u>Share Withholding</u>	A-8
ARTICLE 16.	<u>ASSIGNMENT OR TRANSFER OF AWARDS</u>	A-8
16.1	<u>General</u>	A-8
16.2	<u>Trusts</u>	A-9
ARTICLE 17.	<u>FUTURE OF THE PLAN</u>	A-9
17.1	<u>Term of the Plan</u>	A-9
17.2	<u>Amendment or Termination</u>	A-9
ARTICLE 18.	<u>DEFINITIONS</u>	A-9
18.1	<u>Award</u>	A-9
18.2	<u>Board</u>	A-9
18.3	<u>Change in Control</u>	A-9
18.4	<u>Code</u>	A-10
18.5	<u>Committee</u>	A-10
18.6	<u>Common Share</u>	A-10
18.7	<u>Company</u>	A-10
18.8	<u>Exchange Act</u>	A-10
18.9	<u>Exercise Price,</u>	A-10
18.10	<u>Fair Market Value</u>	A-10
18.11	<u>ISO</u>	A-10
18.12	<u>Key Employee</u>	A-10
18.13	<u>NSO</u>	A-11
18.14	<u>Option</u>	A-11
18.15	<u>Optionee</u>	A-11
18.16	<u>Outside Director</u>	A-11

**Table of Contents**

18.17	<u>Parent</u>	A-11
18.18	<u>Participant</u>	A-11
18.19	<u>Plan</u>	A-11
18.20	<u>Restricted Share</u>	A-11
18.21	<u>SAR</u>	A-11
18.22	<u>SAR Agreement</u>	A-11
18.23	<u>Stock Award Agreement</u>	A-11
18.24	<u>Stock Option Agreement</u>	A-11
18.25	<u>Stock Unit</u>	A-11
18.26	<u>Subsidiary</u>	A-11
ARTICLE 19.	<u>EXECUTION</u>	A-11

---

**Table of Contents**

**AMENDED AND RESTATED**  
**1997 STOCK INCENTIVE PLAN OF**  
**NANOGEN, INC.**

**ARTICLE 1. INTRODUCTION**

The Plan was adopted by the Board effective as of August 1, 1997, and was approved by the Company's stockholders as of August 1, 1997. The Plan is effective as of August 1, 1997. However, Articles 7, 8 and 9 shall not apply prior to the Company's initial public offering on April 14, 1998. The Plan was subsequently (a) amended and restated on June 30, 1999 to increase the number of shares available for issuance under the Plan in Section 3.1; (b) amended on April 14, 2000 for options issued on and after that date, to increase the period during which such options may be exercised after the death or disability of a Plan Participant to twelve months in Section 5.4; (c) amended and restated on June 6, 2000 to increase the number of shares available for issuance under the Plan in Section 3.1 by 1,000,000 shares; (d) amended and restated on June 13, 2001 to increase the number of shares available for issuance under the Plan in Section 3.1 by 1,500,000 shares; (e) amended and restated on April 26, 2001 to remove the ability of the Company in Section 5.6 to approve repricings of options issued pursuant to the Plan without stockholder approval; (f) amended and restated on June 14, 2002 to increase the number of shares available for issuance under the Plan by 750,000 shares; (g) amended and restated on June 12, 2003 to increase the number of shares available for issuance under the Plan by 1,000,000 shares; (h) amended and restated on February 13, 2004 to increase the number of shares available for issuance under the Plan by 1,100,000 shares; (i) amended and restated February 11, 2005 to increase the number of shares available for issuance under the Plan by 1,500,000 shares, and (j) amended and restated May 5, 2006 to increase the number of shares available for issuance under the Plan by 1,500,000 shares, subject to stockholder approval at the 2006 Annual Meeting.

The purpose of the Plan is to promote the long-term success of the Company and the creation of stockholder value by (a) encouraging Key Employees to focus on critical long-range objectives, (b) encouraging the attraction and retention of Key Employees with exceptional qualifications and (c) linking Key Employees directly to stockholder interests through increased stock ownership. The Plan seeks to achieve this purpose by providing for Awards in the form of Restricted Shares, Stock Units, Options (which may constitute incentive stock options or nonstatutory stock options) or stock appreciation rights.

The Plan shall be governed by, and construed in accordance with, the laws of the State of California.

**ARTICLE 2. ADMINISTRATION**

**2.1 Committee Composition.** The Plan shall be administered by the Committee. Except as provided below, the Committee shall consist exclusively of directors of the Company, who shall be appointed by the Board. In addition, the composition of the Committee shall satisfy:

(a) Such requirements, if any, as the Securities and Exchange Commission may establish for administrators acting under plans intended to qualify for exemption under Rule 16b-3 (or its successor) under the Exchange Act; and

(b) Such requirements as the Internal Revenue Service may establish for outside directors acting under plans intended to qualify for exemption under section 162(m)(4)(C) of the Code.

The Board may act on its own behalf with respect to Outside Directors and may also appoint one or more separate committees composed of one or more officers of the Company who need not be directors of the Company and who need not satisfy the foregoing requirements, who may administer the Plan with respect to Key Employees who are not covered employees under section 162(m)(3) of the Code and who are not required to report pursuant to § 16(a) of the Exchange Act.

**2.2 Committee Responsibilities.** The Committee shall (a) select the Key Employees who are to receive Awards under the Plan, (b) determine the type, number, vesting requirements and other features and conditions of

## **Table of Contents**

such Awards, (c) interpret the Plan and (d) make all other decisions relating to the operation of the Plan. The Committee may adopt such rules or guidelines as it deems appropriate to implement the Plan. The Committee's determinations under the Plan shall be final and binding on all persons.

### **ARTICLE 3. SHARES AVAILABLE FOR GRANTS**

**3.1 Basic Limitation.** Common Shares issued pursuant to the Plan may be authorized but unissued shares or treasury shares. The aggregate number of Common Shares available for Restricted Shares, Stock Units, Options and SARs awarded under the Plan shall not exceed 11,943,011. Of the Common Shares available hereunder, no more than 25% in aggregate shall be available with respect to Outside Directors. The limitation of this Section 3.1 shall be subject to adjustment pursuant to Article 10. The number of Common Shares available under this Plan shall be increased by unexercised or forfeited Common Shares under the Company's 1993 and 1995 Stock Plans. As of April 28, 2006, 96,508 shares of Common Stock had been added to the Plan pursuant to the cancellations and forfeitures under the 1993 and 1995 Stock Plans.

**3.2 Additional Shares.** If Stock Units, Options or SARs are forfeited or if Options or SARs terminate for any other reason before being exercised, then the corresponding Common Shares shall again become available for Awards under the Plan. If Restricted Shares are forfeited before any dividends have been paid with respect to such Shares, then such Shares shall again become available for Awards under the Plan. If Stock Units are settled, then only the number of Common Shares (if any) actually issued in settlement of such Stock Units shall reduce the number available under Section 3.1 and the balance shall again become available for Awards under the Plan. If SARs are exercised, then only the number of Common Shares (if any) actually issued in settlement of such SARs shall reduce the number available under Section 3.1 and the balance shall again become available for Awards under the Plan.

**3.3 Dividend Equivalents.** Any dividend equivalents distributed under the Plan shall not be applied against the number of Restricted Shares, Stock Units, Options or SARs available for Awards, whether or not such dividend equivalents are converted into Stock Units.

### **ARTICLE 4. ELIGIBILITY**

**4.1 General Rules.** Only Key Employees (including, without limitation, independent contractors who are not members of the Board) shall be eligible for designation as Participants by the Committee.

**4.2 Outside Directors.** The Committee may provide that the NSOs that otherwise would be granted to an Outside Director under this Plan shall instead be granted to an affiliate of such Outside Director. Such affiliate shall then be deemed to be an Outside Director for purposes of the Plan, provided that the service-related vesting and termination provisions pertaining to the NSOs shall be applied with regard to the service of the Outside Director.

**4.3 Incentive Stock Options.** Only Key Employees who are common-law employees of the Company, a Parent or a Subsidiary shall be eligible for the grant of ISOs. In addition, a Key Employee who owns more than 10% of the total combined voting power of all classes of outstanding stock of the Company or any of its Parents or Subsidiaries shall not be eligible for the grant of an ISO unless the requirements set forth in section 422(c)(6) of the Code are satisfied.

### **ARTICLE 5. OPTIONS**

**5.1 Stock Option Agreement.** Each grant of an Option under the Plan shall be evidenced by a Stock Option Agreement between the Optionee and the Company. Such Option shall be subject to all applicable terms of the Plan and may be subject to any other terms that are not inconsistent with the Plan. The Stock Option Agreement shall specify whether the Option is an ISO or an NSO. The provisions of the various Stock Option Agreements

## **Table of Contents**

entered into under the Plan need not be identical. Options shall be granted in consideration of services rendered to the Company or a Subsidiary. A Stock Option Agreement may provide that a new Option will be granted automatically to the Optionee when he or she exercises a prior Option and pays the Exercise Price in the form described in Section 6.2.

**5.2 Number of Shares.** Each Stock Option Agreement shall specify the number of Common Shares subject to the Option and shall provide for the adjustment of such number in accordance with Article 10. Options granted to any Optionee in a single calendar year shall in no event cover more than 750,000 Common Shares, subject to adjustment in accordance with Article 10.

**5.3 Exercise Price.** Each Stock Option Agreement shall specify the Exercise Price; provided that the Exercise Price under an ISO shall in no event be less than 100% of the Fair Market Value of a Common Share on the date of grant and the Exercise Price under an NSO shall in no event be less than the par value of the Common Shares subject to such NSO. In the case of an NSO, a Stock Option Agreement may specify an Exercise Price that varies in accordance with a predetermined formula while the NSO is outstanding, provided that prior to the Company's initial public offering, the NSO Exercise Price shall be at least 85% (110% for 10% shareholders) of the Fair Market Value of a Common Share of Stock on the date of grant.

**5.4 Exercisability and Term.** Each Stock Option Agreement shall specify the date when all or any installment of the Option is to become exercisable, provided that prior to the Company's initial public offering, Options shall become exercisable pursuant to a schedule providing for at least 20% vesting per year over a five-year period (or, in the case of performance options, to the extent permitted under applicable regulations of the California Department of Corporations). The Stock Option Agreement shall also specify the term of the Option; provided that the term of an ISO shall in no event exceed 10 years from the date of grant. A Stock Option Agreement may provide for accelerated exercisability in the event of the Optionee's death, disability or retirement or other events and may provide for expiration prior to the end of its term in the event of the termination of the Optionee's service.

Options may be awarded in combination with SARs, and such an Award may provide that the Options will not be exercisable unless the related SARs are forfeited. NSOs may also be awarded in combination with Restricted Shares or Stock Units, and such an Award may provide that the NSOs will not be exercisable unless the related Restricted Shares or Stock Units are forfeited.

Options must be exercised within 90 days of the termination of employment (twelve months for termination on account of death or disability).

**5.5 Effect of Change in Control.** The Committee may determine, at the time of granting an Option or thereafter, that such Option shall become fully exercisable as to all Common Shares subject to such Option in the event that a Change in Control occurs with respect to the Company.

**5.6 Modification or Assumption of Options.** Within the limitations of the Plan, the Committee may modify, extend or assume outstanding options or may accept the cancellation of outstanding options (whether granted by the Company or by another issuer) in return for the grant of new options for the same or a different number of shares and at the same or a different exercise price. The Committee may not, however, reprice any options without the consent of the stockholders of the Company. The foregoing notwithstanding, no modification of an Option shall, without the consent of the Optionee, alter or impair his or her rights or obligations under such Option.

**5.7 Other Requirements Prior to Company's Initial Public Offering.** Prior to the Company's initial public offering, Optionees shall receive Company financial statements at least annually.



## **Table of Contents**

### **ARTICLE 6. PAYMENT FOR OPTION SHARES**

6.1 **General Rule.** The entire Exercise Price of Common Shares issued upon exercise of Options shall be payable in cash at the time when such Common Shares are purchased, except as follows:

(a) In the case of an ISO granted under the Plan, payment shall be made only pursuant to the express provisions of the applicable Stock Option Agreement. The Stock Option Agreement may specify that payment may be made in any form(s) described in this Article 6.

(b) In the case of an NSO, the Committee may at any time accept payment in any form(s) described in this Article 6.

6.2 **Surrender of Stock.** To the extent that this Section 6.2 is applicable, payment for all or any part of the Exercise Price may be made with Common Shares which have already been owned by the Optionee for more than six months. Such Common Shares shall be valued at their Fair Market Value on the date when the new Common Shares are purchased under the Plan.

6.3 **Exercise/Sale.** To the extent that this Section 6.3 is applicable, payment may be made by the delivery (on a form prescribed by the Company) of an irrevocable direction to a securities broker approved by the Company to sell Common Shares and to deliver all or part of the sales proceeds to the Company in payment of all or part of the Exercise Price and any withholding taxes.

6.4 **Exercise/Pledge.** To the extent that this Section 6.4 is applicable, payment may be made by the delivery (on a form prescribed by the Company) of an irrevocable direction to pledge Common Shares to a securities broker or lender approved by the Company, as security for a loan, and to deliver all or part of the loan proceeds to the Company in payment of all or part of the Exercise Price and any withholding taxes.

6.5 **Promissory Note.** To the extent that this Section 6.5 is applicable, payment may be made with a full-recourse promissory note; provided that the par value of the Common Shares shall be paid in cash.

6.6 **Other Forms of Payment.** To the extent that this Section 6.6 is applicable, payment may be made in any other form that is consistent with applicable laws, regulations and rules.

### **ARTICLE 7. STOCK APPRECIATION RIGHTS**

7.1 **SAR Agreement.** Each grant of an SAR under the Plan shall be evidenced by an SAR Agreement between the Optionee and the Company. Such SAR shall be subject to all applicable terms of the Plan and may be subject to any other terms that are not inconsistent with the Plan. The provisions of the various SAR Agreements entered into under the Plan need not be identical. SARs may be granted in consideration of a reduction in the Optionee's other compensation.

7.2 **Number of Shares.** Each SAR Agreement shall specify the number of Common Shares to which the SAR pertains and shall provide for the adjustment of such number in accordance with Article 10. SARs granted to any Optionee in a single calendar year shall in no event pertain to more than 300,000 Common Shares, subject to adjustment in accordance with Article 10.

7.3 **Exercise Price.** Each SAR Agreement shall specify the Exercise Price. An SAR Agreement may specify an Exercise Price that varies in accordance with a predetermined formula while the SAR is outstanding.

7.4 **Exercisability and Term.** Each SAR Agreement shall specify the date when all or any installment of the SAR is to become exercisable. The SAR Agreement shall also specify the term of the SAR. An SAR Agreement may provide for accelerated exercisability in the event of the Optionee's death, disability or retirement or other events and may provide for expiration prior to the end of its term in the event of the termination of the Optionee's service. SARs may also be awarded in combination with Options, Restricted Shares or Stock Units, and such an Award may provide that the SARs will not be exercisable unless the related

---

**Table of Contents**

Options, Restricted Shares or Stock Units are forfeited. An SAR may be included in an ISO only at the time of grant but may be included in an NSO at the time of grant or thereafter. An SAR granted under the Plan may provide that it will be exercisable only in the event of a Change in Control.

**7.5 Effect of Change in Control.** The Committee may determine, at the time of granting an SAR or thereafter, that such SAR shall become fully exercisable as to all Common Shares subject to such SAR in the event that a Change in Control occurs with respect to the Company.

**7.6 Exercise of SARs.** The exercise of an SAR shall be subject to the restrictions imposed by Rule 16b-3 (or its successor) under the Exchange Act, if applicable. If, on the date when an SAR expires, the Exercise Price under such SAR is less than the Fair Market Value on such date but any portion of such SAR has not been exercised or surrendered, then such SAR shall automatically be deemed to be exercised as of such date with respect to such portion. Upon exercise of an SAR, the Optionee (or any person having the right to exercise the SAR after his or her death) shall receive from the Company (a) Common Shares, (b) cash or (c) a combination of Common Shares and cash, as the Committee shall determine. The amount of cash and/or the Fair Market Value of Common Shares received upon exercise of SARs shall, in the aggregate, be equal to the amount by which the Fair Market Value (on the date of surrender) of the Common Shares subject to the SARs exceeds the Exercise Price.

**7.7 Modification or Assumption of SARs.** Within the limitations of the Plan, the Committee may modify, extend or assume outstanding SARs or may accept the cancellation of outstanding SARs (whether granted by the Company or by another issuer) in return for the grant of new SARs for the same or a different number of shares and at the same or a different exercise price. The foregoing notwithstanding, no modification of an SAR shall, without the consent of the Optionee, alter or impair his or her rights or obligations under such SAR.

**ARTICLE 8. RESTRICTED SHARES AND STOCK UNITS**

**8.1 Time, Amount and Form of Awards.** Awards under the Plan may be granted in the form of Restricted Shares, in the form of Stock Units, or in any combination of both. Restricted Shares or Stock Units may also be awarded in combination with NSOs or SARs, and such an Award may provide that the Restricted Shares or Stock Units will be forfeited in the event that the related NSOs or SARs are exercised.

**8.2 Payment for Awards.** To the extent that an Award is granted in the form of newly issued Restricted Shares, the Award recipient, as a condition to the grant of such Award, shall be required to pay the Company in cash an amount equal to the par value of such Restricted Shares. To the extent that an Award is granted in the form of Restricted Shares from the Company's treasury or in the form of Stock Units, no cash consideration shall be required of the Award recipients.

**8.3 Vesting Conditions.** Each Award of Restricted Shares or Stock Units shall become vested, in full or in installments, upon satisfaction of the conditions specified in the Stock Award Agreement. A Stock Award Agreement may provide for accelerated vesting in the event of the Participant's death, disability or retirement or other events. The Committee may determine, at the time of making an Award or thereafter, that such Award shall become fully vested in the event that a Change in Control occurs with respect to the Company.

**8.4 Form and Time of Settlement of Stock Units.** Settlement of vested Stock Units may be made in the form of (a) cash, (b) Common Shares or (c) any combination of both, as determined by the Committee. The actual number of Stock Units eligible for settlement may be larger or smaller than the number included in the original Award, based on predetermined performance factors. Methods of converting Stock Units into cash may include (without limitation) a method based on the average Fair Market Value of Common Shares over a series of trading days. Vested Stock Units may be settled in a lump sum or in installments. The distribution may occur or commence when all vesting conditions applicable to the Stock Units have been satisfied or have lapsed, or it may be deferred to any later date. The amount of a deferred distribution may be increased by an interest factor or by dividend equivalents. Until an Award of Stock Units is settled, the number of such Stock Units shall be subject to adjustment pursuant to Article 10.

## **Table of Contents**

**8.5 Death of Recipient.** Any Stock Units Award that becomes payable after the recipient's death shall be distributed to the recipient's beneficiary or beneficiaries. Each recipient of a Stock Units Award under the Plan shall designate one or more beneficiaries for this purpose by filing the prescribed form with the Company. A beneficiary designation may be changed by filing the prescribed form with the Company at any time before the Award recipient's death. If no beneficiary was designated or if no designated beneficiary survives the Award recipient, then any Stock Units Award that becomes payable after the recipient's death shall be distributed to the recipient's estate.

**8.6 Creditors' Rights.** A holder of Stock Units shall have no rights other than those of a general creditor of the Company. Stock Units represent an unfunded and unsecured obligation of the Company, subject to the terms and conditions of the applicable Stock Award Agreement.

## **ARTICLE 9. VOTING AND DIVIDEND RIGHTS**

**9.1 Restricted Shares.** The holders of Restricted Shares awarded under the Plan shall have the same voting, dividend and other rights as the Company's other stockholders. A Stock Award Agreement, however, may require that the holders of Restricted Shares invest any cash dividends received in additional Restricted Shares. Such additional Restricted Shares shall be subject to the same conditions and restrictions as the Award with respect to which the dividends were paid. Such additional Restricted Shares shall not reduce the number of Common Shares available under Article 3.

**9.2 Stock Units.** The holders of Stock Units shall have no voting rights. Prior to settlement or forfeiture, any Stock Unit awarded under the Plan may, at the Committee's discretion, carry with it a right to dividend equivalents. Such right entitles the holder to be credited with an amount equal to all cash dividends paid on one Common Share while the Stock Unit is outstanding. Dividend equivalents may be converted into additional Stock Units. Settlement of dividend equivalents may be made in the form of cash, in the form of Common Shares, or in a combination of both. Prior to distribution, any dividend equivalents which are not paid shall be subject to the same conditions and restrictions as the Stock Units to which they attach.

## **ARTICLE 10. PROTECTION AGAINST DILUTION**

**10.1 Adjustments.** In the event of a subdivision of the outstanding Common Shares, a declaration of a dividend payable in Common Shares, a declaration of a dividend payable in a form other than Common Shares in an amount that has a material effect on the price of Common Shares, a combination or consolidation of the outstanding Common Shares (by reclassification or otherwise) into a lesser number of Common Shares, a recapitalization, a spinoff or a similar occurrence, the Committee shall make such adjustments as it, in its sole discretion, deems appropriate in one or more of (a) the number of Options, SARs, Restricted Shares and Stock Units available for future Awards under Article 3, (b) the limitations set forth in Sections 5.2 and 7.2, (c) the number of NSOs to be granted to Outside Directors under Section 4.2, (d) the number of Stock Units included in any prior Award which has not yet been settled, (e) the number of Common Shares covered by each outstanding Option and SAR or (f) the Exercise Price under each outstanding Option and SAR. Except as provided in this Article 10, a Participant shall have no rights by reason of any issue by the Company of stock of any class or securities convertible into stock of any class, any subdivision or consolidation of shares of stock of any class, the payment of any stock dividend or any other increase or decrease in the number of shares of stock of any class.

**10.2 Reorganizations.** In the event that the Company is a party to a merger or other reorganization, outstanding Options, SARs, Restricted Shares and Stock Units shall be subject to the agreement of merger or reorganization. Such agreement may provide, without limitation, for the assumption of outstanding Awards by the surviving corporation or its parent, for their continuation by the Company (if the Company is a surviving corporation), for accelerated vesting and accelerated expiration (provided the Company has previously had its initial public offering), or for settlement in cash.

## **Table of Contents**

### **ARTICLE 11. AWARDS UNDER OTHER PLANS**

The Company may grant awards under other plans or programs. Such awards may be settled in the form of Common Shares issued under this Plan. Such Common Shares shall be treated for all purposes under the Plan like Common Shares issued in settlement of Stock Units and shall, when issued, reduce the number of Common Shares available under Article 3.

### **ARTICLE 12. PAYMENT OF DIRECTOR S FEES IN SECURITIES**

**12.1 Effective Date.** No provision of this Article 12 shall be effective unless and until the Board has determined to implement such provision.

**12.2 Elections to Receive NSOs, Restricted Shares or Stock Units.** An Outside Director may elect to receive his or her annual retainer payments and meeting fees from the Company in the form of cash, NSOs, Restricted Shares, Stock Units, or a combination thereof, as determined by the Board. Such NSOs, Restricted Shares and Stock Units shall be issued under the Plan. An election under this Article 12 shall be filed with the Company on the prescribed form.

**12.3 Number and Terms of NSOs, Restricted Shares or Stock Units.** The number of NSOs, Restricted Shares or Stock Units to be granted to Outside Directors in lieu of annual retainers and meeting fees that would otherwise be paid in cash shall be calculated in a manner determined by the Board. The terms of such NSOs, Restricted Shares or Stock Units shall also be determined by the Board.

### **ARTICLE 13. LIMITATION ON RIGHTS**

**13.1 Retention Rights.** Neither the Plan nor any Award granted under the Plan shall be deemed to give any individual a right to remain an employee, consultant or director of the Company, a Parent or a Subsidiary. The Company and its Parents and Subsidiaries reserve the right to terminate the service of any employee, consultant or director at any time, with or without cause, subject to applicable laws, the Company s certificate of incorporation and by-laws and a written employment agreement (if any).

**13.2 Stockholders Rights.** A Participant shall have no dividend rights, voting rights or other rights as a stockholder with respect to any Common Shares covered by his or her Award prior to the issuance of a stock certificate for such Common Shares. No adjustment shall be made for cash dividends or other rights for which the record date is prior to the date when such certificate is issued, except as expressly provided in Articles 8, 9 and 10.

**13.3 Regulatory Requirements.** Any other provision of the Plan notwithstanding, the obligation of the Company to issue Common Shares under the Plan shall be subject to all applicable laws, rules and regulations and such approval by any regulatory body as may be required. The Company reserves the right to restrict, in whole or in part, the delivery of Common Shares pursuant to any Award prior to the satisfaction of all legal requirements relating to the issuance of such Common Shares, to their registration, qualification or listing or to an exemption from registration, qualification or listing.

### **ARTICLE 14. LIMITATION ON PAYMENTS**

**14.1 Gross-Up Payment.** In the event that it is determined that any payment or transfer by the Company under the Plan to or for the benefit of (the Payment ) would be subject to the excise tax imposed by section 4999 of the Code or any interest or penalties with respect to such excise tax (such excise tax, together with any such interest or penalties, are collectively referred to as the Excise Tax ), then the Participant shall be entitled to receive an additional payment (a Gross-Up Payment ) in an amount that shall fund the payment by the Participant of any Excise Tax on the Payment as well as all income taxes imposed on the Gross-Up Payment, any Excise Tax imposed on the Gross-Up Payment and any interest or penalties imposed with respect to taxes on the Gross-Up Payment or any Excise Tax.

---

## **Table of Contents**

**14.2 Determination by Accountant.** All mathematical determinations and all determinations of whether any of the Payments are parachute payments (within the meaning of section 280G of the Code) including all determinations of whether a Gross-Up Payment is required, of the amount of such Gross-Up Payment and of amounts determined under § 14.3 shall be made by the independent registered public accounting firm most recently selected by the Board (the Auditors), which shall provide its determination (the Determination), together with detailed supporting calculations regarding the amount of any Gross-Up Payment and any other relevant matters, both to the Company and to the Participant within seven business days of the Participant's termination date, if applicable, or such earlier time as is requested by the Company or by the Participant (if the Participant reasonably believes that any of the Total Payments may be subject to the Excise Tax). If the Accounting Firm determines that no Excise Tax is payable by the Participant, it shall furnish the Participant with a written statement that the Auditors have concluded that no Excise Tax is payable (including the reasons therefore) and that the Participant has substantial authority not to report any Excise Tax on the Participant's federal income tax return. If a Gross-Up Payment is determined to be payable, it shall be paid to the Participant within five business days after the Determination is delivered to the Company or the Participant. Any determination by the Auditors shall be binding upon the Company and the Participant, absent manifest error.

**14.3 Underpayments and Overpayments.** As a result of uncertainty in the application of section 4999 of the Code at the time of the initial determination by the Auditors hereunder, it is possible that Gross-Up Payments not made by the Company should have been made (Underpayments) or that Gross-Up Payments will have been made by the Company which should not have been made (Overpayments). In either event, the Auditors shall determine the amount of the Underpayment or Overpayment that has occurred. In the case of an Underpayment, the amount of such Underpayment shall promptly be paid by the Company to or for the benefit of the Employee. In the case of an Overpayment, the Employee shall, at the direction and expense of the Company, take such steps as are reasonably necessary (including the filing of returns and claims for refund), follow reasonable instructions from, and procedures established by, the Company and otherwise reasonably cooperate with the Company to correct such Overpayment; *provided, however*, that (i) the Employee shall in no event be obligated to return to the Company an amount greater than the net after-tax portion of the Overpayment that the Employee has retained or has recovered as a refund from the applicable taxing authorities and (ii) this provision shall be interpreted in a manner consistent with the intent of this Article 14, which is to make the Employee whole, on an after-tax basis, for the application of the Excise Tax, it being understood that the correction of an Overpayment may result in the Employee's repaying to the Company an amount which is less than the Overpayment.

**14.4 Related Corporations.** For purposes of this Article 14, the term Company shall include affiliated corporations to the extent determined by the Auditors in accordance with section 280G(d)(5) of the Code.

## **ARTICLE 15. WITHHOLDING TAXES**

**15.1 General.** To the extent required by applicable federal, state, local or foreign law, a Participant or his or her successor shall make arrangements satisfactory to the Company for the satisfaction of any withholding tax obligations that arise in connection with the Plan. The Company shall not be required to issue any Common Shares or make any cash payment under the Plan until such obligations are satisfied.

**15.2 Share Withholding.** The Committee may permit a Participant to satisfy all or part of his or her withholding or income tax obligations by having the Company withhold all or a portion of any Common Shares that otherwise would be issued to him or her or by surrendering all or a portion of any Common Shares that he or she previously acquired. Such Common Shares shall be valued at their Fair Market Value on the date when taxes otherwise would be withheld in cash. Any payment of taxes by assigning Common Shares to the Company may be subject to restrictions, including any restrictions required by rules of the Securities and Exchange Commission.

## **ARTICLE 16. ASSIGNMENT OR TRANSFER OF AWARDS**

**16.1 General.** An Award granted under the Plan shall not be anticipated, assigned, attached, garnished, optioned, transferred or made subject to any creditor's process, whether voluntarily, involuntarily or by operation

---

**Table of Contents**

of law, except as approved by the Committee. Notwithstanding the foregoing, ISOs and, prior to the Company's initial public offering, NSOs may not be transferable. However, this Article 16 shall not preclude a Participant from designating a beneficiary who will receive any outstanding Awards in the event of the Participant's death, nor shall it preclude a transfer of Awards by will or by the laws of descent and distribution.

16.2 **Trusts.** Neither this Article 16 nor any other provision of the Plan shall preclude a Participant from transferring or assigning Restricted Shares to (a) the trustee of a trust that is revocable by such Participant alone, both at the time of the transfer or assignment and at all times thereafter prior to such Participant's death, or (b) the trustee of any other trust to the extent approved in advance by the Committee in writing. A transfer or assignment of Restricted Shares from such trustee to any person other than such Participant shall be permitted only to the extent approved in advance by the Committee in writing, and Restricted Shares held by such trustee shall be subject to all of the conditions and restrictions set forth in the Plan and in the applicable Stock Award Agreement, as if such trustee were a party to such Agreement.

**ARTICLE 17. FUTURE OF THE PLAN**

17.1 **Term of the Plan.** The Plan, as set forth herein, was adopted as of August 1, 1997, and became effective August 1, 1997, except that Articles 7, 8 and 9 shall not be effective prior to the date of the Company's initial public offering on April 14, 1998. The Plan shall remain in effect until it is terminated under Section 17.2, except that no ISOs shall be granted after July 31, 2007.

17.2 **Amendment or Termination.** The Board may, at any time and for any reason, amend or terminate the Plan. An amendment of the Plan shall be subject to the approval of the Company's stockholders only to the extent required by applicable laws, regulations or rules. No Awards shall be granted under the Plan after the termination thereof. The termination of the Plan, or any amendment thereof, shall not affect any Award previously granted under the Plan.

**ARTICLE 18. DEFINITIONS**

18.1 **Award** means any award of an Option, an SAR, a Restricted Share or a Stock Unit under the Plan.

18.2 **Board** means the Company's Board of Directors, as constituted from time to time.

18.3 **Change in Control** shall mean the occurrence of any of the following events:

(a) The consummation of a merger or consolidation of the Company with or into another entity or any other corporate reorganization, if more than 50% of the combined voting power of the continuing or surviving entity's securities outstanding immediately after such merger, consolidation or other reorganization is owned by persons who were not stockholders of the Company immediately prior to such merger, consolidation or other reorganization;

(b) A change in the composition of the Board, as a result of which fewer than one-half of the incumbent directors are directors who either:

(A) Had been directors of the Company 24 months prior to such change; or

(B) Were elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the directors who had been directors of the Company 24 months prior to such change and who were still in office at the time of the election or nomination; or

(c) Any person (as such term is used in sections 13(d) and 14(d) of the Exchange Act) by the acquisition or aggregation of securities is or becomes the beneficial owner, directly or indirectly, of securities of the Company representing 50% or more of the combined voting power of the Company's then outstanding securities ordinarily (and apart from rights accruing under special circumstances) having the right to vote at elections of directors (the **Base Capital Stock**); except that any change in the relative beneficial ownership of

---

**Table of Contents**

the Company's securities by any person resulting solely from a reduction in the aggregate number of outstanding shares of Base Capital Stock, and any decrease thereafter in such person's ownership of securities, shall be disregarded until such person increases in any manner, directly or indirectly, such person's beneficial ownership of any securities of the Company. Thus, for example, any person who owns less than 50% of the Company's outstanding shares, shall cause a Change in Control to occur as of any subsequent date if such person then acquires an additional interest in the Company which, when added to the person's previous holdings, causes the person to hold more than 50% of the Company's outstanding shares.

The term "Change in Control" shall not include the Company's initial public offering or a transaction, the sole purpose of which is to change the state of the Company's incorporation.

18.4 "Code" means the Internal Revenue Code of 1986, as amended.

18.5 "Committee" means a committee of the Board, as described in Article 2.

18.6 "Common Share" means one share of the common stock of the Company.

18.7 "Company" means Nanogen, Inc., a Delaware corporation.

18.8 "Exchange Act" means the Securities Exchange Act of 1934, as amended.

18.9 "Exercise Price," in the case of an Option, means the amount for which one Common Share may be purchased upon exercise of such Option, as specified in the applicable Stock Option Agreement. "Exercise Price," in the case of an SAR, means an amount, as specified in the applicable SAR Agreement, which is subtracted from the Fair Market Value of one Common Share in determining the amount payable upon exercise of such SAR.

18.10 "Fair Market Value" means the market price of Common Shares, determined by the Committee as follows:

(a) If the Common Shares were traded over-the-counter on the date in question but was not traded on the Nasdaq Stock Market or the Nasdaq National Market, then the Fair Market Value shall be equal to the mean between the last reported representative bid and asked prices quoted for such date by the principal automated inter-dealer quotation system on which the Common Shares are quoted or, if the Common Shares are not quoted on any such system, by the "Pink Sheets" published by the National Quotation Bureau, Inc.;

(b) If the Common Shares were traded over-the-counter on the date in question and were traded on the Nasdaq Stock Market or the Nasdaq National Market, then the Fair Market Value shall be equal to the last-transaction price quoted for such date by the Nasdaq Stock Market or the Nasdaq National Market;

(c) If the Common Shares were traded on a stock exchange on the date in question, then the Fair Market Value shall be equal to the closing price reported by the applicable composite transactions report for such date; and

(d) If none of the foregoing provisions is applicable, then the Fair Market Value shall be determined by the Committee in good faith on such basis as it deems appropriate.

Whenever possible, the determination of Fair Market Value by the Committee shall be based on the prices reported in the Western Edition of *The Wall Street Journal*. Such determination shall be conclusive and binding on all persons.

18.11 "ISO" means an incentive stock option described in section 422(b) of the Code.

18.12 "Key Employee" means (a) a common-law employee of the Company, a Parent or a Subsidiary, (b) an Outside Director and (c) a consultant or adviser who provides services to the Company, a Parent or a Subsidiary

**Table of Contents**

as an independent contractor. Service as an Outside Director or as an independent contractor shall be considered employment for all purposes of the Plan, except as provided in Sections 4.2 and 4.3.

18.13 NSO means a stock option not described in sections 422 or 423 of the Code.

18.14 Option means an ISO or NSO granted under the Plan and entitling the holder to purchase one Common Share.

18.15 Optionee means an individual or estate who holds an Option or SAR.

18.16 Outside Director shall mean a member of the Board who is not a common-law employee of the Company, a Parent or a Subsidiary.

18.17 Parent means any corporation (other than the Company) in an unbroken chain of corporations ending with the Company, if each of the corporations other than the Company owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Parent on a date after the adoption of the Plan shall be considered a Parent commencing as of such date.

18.18 Participant means an individual or estate who holds an Award.

18.19 Plan means this 1997 Stock Incentive Plan of Nanogen, Inc., as amended from time to time.

18.20 Restricted Share means a Common Share awarded under the Plan.

18.21 SAR means a stock appreciation right granted under the Plan.

18.22 SAR Agreement means the agreement between the Company and an Optionee which contains the terms, conditions and restrictions pertaining to his or her SAR.

18.23 Stock Award Agreement means the agreement between the Company and the recipient of a Restricted Share or Stock Unit which contains the terms, conditions and restrictions pertaining to such Restricted Share or Stock Unit.

18.24 Stock Option Agreement means the agreement between the Company and an Optionee which contains the terms, conditions and restrictions pertaining to his or her Option.

18.25 Stock Unit means a bookkeeping entry representing the equivalent of one Common Share, as awarded under the Plan.

18.26 Subsidiary means any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company, if each of the corporations other than the last corporation in the unbroken chain owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Subsidiary on a date after the adoption of the Plan shall be considered a Subsidiary commencing as of such date.

**ARTICLE 19. EXECUTION**

To record the adoption of the Plan by the Board, the Company has caused its duly authorized officer to affix the corporate name and seal hereto.

**NANOGEN, INC.**

/s/ WILLIAM L. RESPES

**William L. Respess, Esq.**

*Senior Vice President, General Counsel and Secretary*





**Table of Contents**

**APPENDIX B**

**NANOGEN, INC.**

**EMPLOYEE STOCK PURCHASE PLAN**

**SECTION 1. PURPOSE OF THE PLAN.**

The Plan was adopted by the Company's Board of Directors on November 21, 1997, and amended by the Board of Directors and approved by the Company's stockholders effective as of April 3, 1998. The Plan effective date was the effective date of the Company's initial public offering. The Plan was further amended by the Board of Directors to increase the number of shares available under the Plan from 300,000 shares to 450,000 shares and the amendment was approved by the Company's stockholders effective June 13, 2001. The Plan was amended on February 13, 2004 to increase the number of shares available under the Plan from 450,000 shares to 600,000 shares, subject to stockholder approval at the 2004 Annual Meeting. The Plan was amended on May 5, 2006 to increase the number of shares available under the Plan from 600,000 shares to 1,100,000 shares, subject to stockholder approval at the 2006 Annual Meeting.

The purpose of the Plan is to provide Eligible Employees with an opportunity to increase their proprietary interest in the success of the Company by purchasing Stock from the Company on favorable terms and to pay for such purchases through payroll deductions. The Plan is intended to qualify under section 423 of the Internal Revenue Code of 1986, as amended.

**SECTION 2. ADMINISTRATION OF THE PLAN.**

(a) The Committee. The Plan shall be administered by the Committee. The interpretation and construction by the Committee of any provision of the Plan or of any right to purchase Stock granted under the Plan shall be conclusive and binding on all persons.

(b) Rules and Forms. The Committee may adopt such rules and forms under the Plan as it considers appropriate.

**SECTION 3. ENROLLMENT AND PARTICIPATION.**

(a) Offering Periods. While the Plan is in effect, two overlapping Offering Periods shall commence in each calendar year. Except for the first Offering Period, Offering Periods shall consist of the twenty-four (24) month periods commencing on each January 1 and July 1. The first Offering Period commenced on the effective date of the Company's initial public offering and ended on December 31, 1999.

(b) Accumulation Periods. While the Plan is in effect, two Accumulation Periods shall commence in each calendar year. Except for the first Accumulation Period, Accumulation Periods shall consist of the six (6) month periods commencing on each January 1 and July 1. The first Accumulation Period shall commence on the effective date of the Company's initial public offering and end on June 30, 1998.

(c) Enrollment. Any individual who, on the day preceding the first day of an Offering Period, qualifies as an Eligible Employee may elect to become a Participant in the Plan for such Offering Period by executing the enrollment form prescribed for this purpose by the Committee.

(d) Duration of Participation. Once enrolled in the Plan, a Participant shall continue to participate until he or she ceases to be an Eligible Employee, withdraws from the Plan or reaches the end of the Accumulation Period in which he or she discontinued contributions. A Participant who discontinued contributions under Section 4(d) or withdrew from the Plan under Section 5(a) may again become a Participant, if he or she then is an Eligible Employee, by following the procedure described in Subsection (c) above.

---

**Table of Contents**

(e) Applicable Offering Period. For purposes of calculating the Purchase Price under Section 7(b), the applicable Offering Period shall be determined as follows:

(i) Once a Participant is enrolled in the Plan for an Offering Period, such Offering Period shall continue to apply to him or her until the earliest of (A) the end of such Offering Period, (B) the end of his or her participation under Subsection (d) above or (C) re-enrollment in a subsequent Offering Period under Paragraph (ii) below.

(ii) In the event that the Fair Market Value of Stock on the last trading day before the commencement of the Offering Period in, which the Participant is enrolled is higher than on the last trading day before the commencement of any subsequent Offering Period, the Participant shall automatically be re-enrolled for such subsequent Offering Period.

(iii) When a Participant reaches the end of an Offering Period but his or her participation is to continue, then such Participant shall automatically be re-enrolled for the Offering Period that commences immediately after the end of the prior Offering Period.

**SECTION 4. EMPLOYEE CONTRIBUTIONS.**

(a) Frequency of Payroll Deductions. A Participant may purchase shares of Stock under the Plan solely by means of payroll deductions. Payroll deductions, as designated by the Participant pursuant to Subsection (b) below, shall occur on each payday during participation in the Plan.

(b) Amount of Payroll Deductions. An Eligible Employee shall designate on the enrollment form the portion of his or her Compensation that he or she elects to have withheld for the purchase of Stock. Such portion shall be a whole percentage of the Eligible Employee's Compensation, but not less than one percent (1%) nor more than fifteen percent (15%).

(c) Changing Withholding Rate. If a Participant wishes to change the rate of payroll withholding, he or she may do so by filing a new enrollment form with the Company not later than one week prior to the last working day prior to the commencement of the Accumulation Period for which such change is to be effective.

(d) Discontinuing Payroll Deductions. If a Participant wishes to discontinue employee contributions entirely, he or she may do so by filing a new enrollment form at any time. Payroll withholding shall cease as soon as reasonably practicable after such form has been received by the Company.

**SECTION 5. WITHDRAWAL FROM THE PLAN.**

(a) Withdrawal. A Participant may elect to withdraw from the Plan by filing the prescribed form with the Company at any time before the last day of an Accumulation Period. As soon as reasonably practicable thereafter, payroll deductions shall cease and the entire amount credited to the Participant's Plan Account shall be refunded to him or her in cash, without interest. No partial withdrawals shall be permitted.

(b) Re-enrollment After Withdrawal. A former Participant who has withdrawn from the Plan shall not be a Participant until he or she re-enrolls in the Plan under Section 3(b).

**SECTION 6. TERMINATION OF EMPLOYMENT OR DEATH.**

(a) Termination of Employment. Termination of employment as an Eligible Employee for any reason, including death, shall be treated as an automatic withdrawal from the Plan under Section 5(a). (A transfer from one Participating Company to another shall not be treated as a termination of employment.)

(b) Death. In the event of the Participant's death, the amount credited to his or her Plan Account shall be paid to a beneficiary designated by him or her for this purpose on the prescribed form or, if none, to the Participant's estate. Such form shall be valid only if it was filed with the Company before the Participant's death.

---

**Table of Contents**

**SECTION 7. PLAN ACCOUNTS AND PURCHASE OF SHARES.**

(a) Plan Accounts. The Company shall maintain a Plan Account on its books in the name of each Participant. Whenever an amount is deducted from the Participant's Compensation under the Plan, such amount shall be credited to the Participant's Plan Account. No interest shall be credited to Plan Accounts.

(b) Purchase Price. The Purchase Price for each share of Stock purchased at the close of an Accumulation Period shall be the lower of:

(i) Eighty-five percent (85%) of the Fair Market Value of such share on the last trading day before the commencement of the applicable Offering Period (as determined under Section 3(e)); or

(ii) Eighty-five percent (85%) of the Fair Market Value of such share on the last trading day in such Accumulation Period.

(c) Number of Shares Purchased. As of the last day of each Accumulation Period, each Participant shall be deemed to have elected to purchase the number of shares of Stock calculated in accordance with this Subsection (c), unless the Participant has previously elected to withdraw from the Plan in accordance with Section 5(a). The amount then in the Participant's Plan Account shall be divided by the Purchase Price, and the number of shares that results shall be purchased from the Company with the funds in the Participant's Plan Account. The foregoing notwithstanding, no Participant shall purchase more than a maximum of 1,666 shares of Stock with respect to any Accumulation Period nor shares of Stock in excess of the amounts set forth in Sections 8 and 12(a). The Committee may determine with respect to all Participants that any fractional share, as calculated under this Subsection (c), shall be rounded down to the next lower whole share.

(d) Available Shares Insufficient. In the event that the aggregate number of shares that all Participants elect to purchase during an Accumulation Period exceeds the maximum number of shares remaining available for issuance under Section 12(a), then the number of shares to which each Participant is entitled shall be determined by multiplying the number of shares available for issuance by a fraction, the numerator of which is the number of shares that such Participant has elected to purchase and the denominator of which is the number of shares that all Participants have elected to purchase.

(e) Issuance of Stock. Certificates representing the shares of Stock purchased by a Participant under the Plan shall be issued to him or her as soon as reasonably practicable after the close of the applicable Accumulation Period, except that the Committee may determine that such shares shall be held for each Participant's benefit by a broker designated by the Committee (unless the Participant has elected that certificates be issued to him or her). Shares may be registered in the name of the Participant or jointly in the name of the Participant and his or her spouse as joint tenants with right of survivorship or as community property.

(f) Unused Cash Balances. An amount remaining in the Participant's Plan Account that represents the Purchase Price for any fractional share shall be carried over in the Participant's Plan Account to the next Accumulation Period. Any amount remaining in the Participant's Plan Account that represents the Purchase Price for whole shares that could not be purchased by reason of Subsection (c) above or Section 12(a) shall be refunded to the Participant in cash, without interest.

(g) Failure of Shareholders to Approve Plan. In the event shareholders of the Company do not approve this Plan, the Participant's Plan Account shall be repaid to the Participant in cash and no Company shares will be purchased for the Participant under this Plan.

Any other provision of the Plan notwithstanding, no Participant shall be granted a right to purchase Stock under the Plan if:

(a) Such Participant, immediately after his or her election to purchase such Stock, would own stock possessing more than five percent (5%) of the total combined voting power or value of all classes of stock of the Company or any parent or Subsidiary of the Company; or

**Table of Contents**

(b) Under the terms of the Plan, such Participant's rights to purchase stock under this and all other qualified employee stock purchase plans of the Company or any parent or Subsidiary of the Company would accrue at a rate that exceeds \$25,000 of the fair market value of such stock (determined at the time when such right is granted) for each calendar year for which such right or option is outstanding at any time.

Ownership of stock shall be determined after applying the attribution rules of section 424(d) of the Internal Revenue Code of 1986, as amended. For purposes of this Section 8, each Participant shall be considered to own any stock that he or she has a right or option to purchase under this or any other plan, and each Participant shall be considered to have the right to purchase 1,666 shares of Stock under this Plan with respect to each Accumulation Period.

**SECTION 9. RIGHTS NOT TRANSFERABLE.**

The rights of any Participant under the Plan, or any Participant's interest in any Stock or moneys to which he or she may be entitled under the Plan, shall not be transferable by voluntary or involuntary assignment or by operation of law, or in any other manner other than by beneficiary designation or the laws of descent and distribution. If a Participant in any manner attempts to transfer, assign or otherwise encumber his or her rights or interest under the Plan, other than by beneficiary designation or the laws of descent and distribution, then such act shall be treated as an election by the Participant to withdraw from the Plan under Section 5(a).

**SECTION 10. NO RIGHTS AS AN EMPLOYEE.**

Nothing in the Plan shall be construed to give any person the right to remain in the employ of a Participating Company. Each Participating Company reserves the right to terminate the employment of any person at any time, with or without cause.

**SECTION 11. NO RIGHTS AS A STOCKHOLDER.**

A Participant shall have no rights as a stockholder with respect to any shares that he or she has purchased, or may have a right to purchase, under the Plan until the date of issuance of a stock certificate for such shares.

**SECTION 12. STOCK OFFERED UNDER THE PLAN.**

(a) Authorized Shares. The aggregate number of shares of Stock available for purchase under the Plan shall be 1,100,000, subject to adjustment pursuant to this Section 12.

(b) Anti-dilution Adjustments. The aggregate number of shares of Stock offered under the Plan, the 1,666-share limitation described in Section 7(c) and the price of shares that any Participant has elected to purchase shall be adjusted proportionately by the Committee for any increase or decrease in the number of outstanding shares of Stock resulting from a subdivision or consolidation of shares, the payment of a stock dividend, any other increase or decrease in such shares effected without receipt or payment of consideration by the Company or the distribution of the shares of a Subsidiary to the Company's stockholders.

(c) Reorganizations. In the event of a dissolution or liquidation of the Company, or a merger or consolidation to which the Company is a constituent corporation, the Plan shall terminate unless the plan of merger, consolidation or reorganization provides otherwise, and all amounts that have been withheld but not yet applied to purchase Stock hereunder shall be refunded, without interest. The Plan shall in no event be construed to restrict in any way the Company's right to undertake a dissolution, liquidation, merger, consolidation or other reorganization.

## **Table of Contents**

### **SECTION 13. AMENDMENT OR DISCONTINUANCE.**

The Board of Directors shall have the right to amend, suspend or terminate the Plan at any time and without notice. Except as provided in Section 12, any increase in the aggregate number of shares of Stock to be issued under the Plan shall be subject to approval by a vote of the stockholders of the Company. In addition, any other amendment of the Plan shall be subject to approval by a vote of the stockholders of the Company to the extent required by an applicable law or regulation.

### **SECTION 14. DEFINITIONS.**

- (a) **Accumulation Period** means a six (6) month period during which contributions may be made toward the purchase of Stock under the Plan, as determined pursuant to Section 3(b).
- (b) **Board of Directors** means the Board of Directors of the Company, as constituted from time to time.
- (c) **Committee** means a committee of the Board of Directors, consisting of one or more directors appointed by the Board of Directors.
- (d) **Company** means Nanogen, Inc., a Delaware corporation.
- (e) **Compensation** means the total compensation paid in cash to a Participant by a Participating Company, including salaries, wages, overtime pay and commissions, but excluding bonuses, incentive compensation, moving or relocation allowances, car allowances, imputed income attributable to cars or life insurance, taxable fringe benefits and similar items, all as determined by the Committee.
- (f) **Eligible Employee** means any employee of a Participating Company:
  - (i) Whose customary employment is for more than five (5) months per calendar year and for more than twenty (20) hours per week; and
  - (ii) Who has been an employee of a Participating Company for not less than one (1) month.
- (g) **Fair Market Value** shall mean the market price of Stock, determined by the Committee as follows:
  - (i) If Stock was traded over-the-counter on the date in question but was not traded on the Nasdaq Stock Market or the Nasdaq National Market, then the Fair Market Value shall be equal to the mean between the last reported representative bid and asked prices quoted for such date by the principal automated inter-dealer quotation system on which Stock is quoted or, if the Stock is not quoted on any such system, by the Pink Sheets published by the National Quotation Bureau, Inc.;
  - (ii) If Stock was traded over-the-counter on the date in question and was traded on the Nasdaq Stock Market or the Nasdaq National Market, then the Fair Market Value shall be equal to the last-transaction price quoted for such date by the Nasdaq Stock Market or the Nasdaq National Market;
  - (iii) If the Stock was traded on a stock exchange on the date in question, then the Fair Market Value shall be equal to the closing price reported by the applicable composite transactions report for such date; and
  - (iv) If none of the foregoing provisions is applicable, then the Fair Market Value shall be determined by the Committee in good faith on such basis as it deems appropriate.

Whenever possible, the determination of Fair Market Value by the Committee shall be based on the prices reported in the Western Edition of The Wall Street Journal or as reported directly to the Company by Nasdaq or a comparable exchange. Such determination shall be conclusive and binding on all persons.

- (h) **Offering Period** means a twenty-four (24) month period with respect to which the right to purchase Stock may be granted under the Plan, as determined pursuant to Section 3(a).



**Table of Contents**

- (i) Participant means an Eligible Employee who elects to participate in the Plan, as provided in Section 3(c).
- (j) Participating Company means the Company and each present or future Subsidiary, except Subsidiaries excluded by the Committee.
- (k) Plan means this Nanogen, Inc. Employee Stock Purchase Plan, as amended from time to time.
- (l) Plan Account means the account established for each Participant pursuant to Section 6(a).
- (m) Purchase Price means the price at which Participants may purchase Stock under the Plan, as determined pursuant to Section 7(b).
- (n) Stock means the Common Stock of the Company.
- (o) Subsidiary means a corporation, fifty percent (50%) or more of the total combined voting power of all classes of stock of which is owned by the Company or by another Subsidiary.

**SECTION 15. EXECUTION.**

To record the adoption of the Plan by the Board of Directors, the Company has caused its duly authorized officer to affix the corporate name and seal hereto.

NANOGEN, INC.

By: /s/ WILLIAM L. RESPESS, ESQ.  
Its Senior Vice President,

**General Counsel and Secretary**

B-6



**Table of Contents**

---