NANOGEN INC Form DEF 14A April 29, 2004

# **SCHEDULE 14A INFORMATION**

**Proxy Statement Pursuant to Section 14(a)** 

of the Securities Exchange Act of 1934

Filed by the Registrant x	
Filed by a Party other than the Registrant "	
Check the appropriate box:	
<ul> <li>Preliminary Proxy Statement</li> <li>Definitive Proxy Statement</li> <li>Definitive Additional Materials</li> <li>Soliciting Material Pursuant to \$240.14a-12</li> </ul>	" Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
	NOGEN, INC. Registrant as Specified In Its Charter)
	N/A
(Name of Person(s) Fili	ing Proxy Statement, if other than the Registrant)
Payment of Filing Fee (Check the appropriate box):	
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(1) Title of each class of securities to which transact	tion applies:

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

10398 Pacific Center Court					
San Diego, California 92121					
Tel: (858) 410-4600					
Fax: (858) 410-4949					
April 29, 2004					
Dear Stockholder:					
You are cordially invited to attend our Annual Meeting of Stockholders, which will be held on Wednesday, June 9, 2004 at 11:00 a.m. at the Hilton La Jolla Torrey Pines located at 10950 N. Torrey Pines Road, La Jolla, California 92037.					
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					

Nanogen, Inc.	
<del></del>	
Notice Of Annual Meeting Of Stockholders	
To Be Held June 9, 2004	
The Annual Meeting of Stockholders of Nanogen, Inc. (the Company) will be held at the Hilton La Jolla Torrey Pines located at 10950 N. Forrey Pines Road, La Jolla, California 92037 on June 9, 2004, at 11:00 a.m., for the following purposes:	
1. To elect one Class III director.	
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 1,100,000 shares.	
3. To approve an amendment to the Employee Stock Purchase Plan ( Purchase Plan ) to increase the number of shares authorized for s under the Purchase Plan by 150,000 shares.	ale
4. To ratify the appointment of Ernst & Young LLP as the Company s independent auditors for the fiscal year ending December 31, 2004.	
5. To transact such other business as may properly come before the Annual Meeting and any adjournment of thereof.	
The Board of Directors has fixed the close of business on April 15, 2004, 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. Respess, Esq.	

Senior Vice President, General Counsel and Secretary

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 Hilton La Jolla Torrey Pines located at 10950 N. Torrey Pines Road, La Jolla, California 92037 on June 9, 2004, and any adjournment of the Annual Meeting (the Annual Meeting).

#### 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 nominee for Class III director 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 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 voting in person at the Annual Meeting. 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 15, 2004 are entitled to notice of and to vote at the Annual Meeting. As of April 15, 2003 the Company had 31,607,746 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 voted 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, the director nominee who receives the most votes cast in his or her favor will be elected. Votes that are withheld from the nominee will be excluded entirely from the election of the Class III director and will have no effect on the outcome. A broker non-vote has no effect in the outcome of the election of the Class III director, 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 it 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 the proposal 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. Employees of Georgeson & Co. will also solicit proxies at an anticipated fee of approximately \$9,500 plus reasonable out-of-pocket expenses.

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 nominee 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 Ernst & Young LLP as our independent auditor for fiscal year 2004 (Proposal 4).

This Proxy Statement and the accompanying form of proxy are being mailed to stockholders on or about May 6, 2004.

#### **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.

#### PROPOSAL 1

#### **ELECTION OF DIRECTORS**

The Company has a classified Board of Directors, with three classes having staggered terms of three years each. The Board of Directors currently consists of two Class I directors, two Class II directors and one Class III director. Of the current directors, the Class III director has a term expiring at the Annual Meeting, the Class I directors have a term expiring at the 2005 annual meeting of stockholders and the Class II directors have a term expiring at the 2006 annual meeting of stockholders.

The Nominating, Governance and Ethics Committee of the Board of Directors recommended, and the Board of Directors approved, Val Buonaiuto as the nominee for election at the Annual Meeting to Class III of the Board of Directors. If elected, Mr. Buonaiuto will serve for a term of three years expiring at the 2007 annual meeting of stockholders and until his successor shall have been elected and qualified. Mr. Buonaiuto has consented to be named as the nominee and agreed to serve if elected. If, however, he is unable to serve, proxies will be voted by such the person 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 Val Buonaiuto to the Board of Directors.

Set forth below is information regarding the nominee for the Class III director and the continuing directors of Class I and Class II as of April 22, 2004:

## NOMINEE TO SERVE AS CLASS III DIRECTOR SERVING A TERM EXPIRING AT THE 2007 ANNUAL MEETING

Val Buonaiuto, age 61

Mr. Buonaiuto has been a director of the Company since October 1999. Mr. Buonaiuto has been a Senior Advisor to Hitachi High Technologies from 1998 to the present. From 1991 to 1998 he served as President and Chief Executive Officer of Hitachi Instruments, Inc. Prior to joining Hitachi Instruments as Vice President, Sales and Marketing in 1987, Mr. Buonaiuto held the position as General Manager of Perkin-Elmer s Worldwide Instrument Sales and Service Operations. His professional experience spans the following areas: manufacturing, engineering, sales, service and operations and corporate management. Mr. Buonaiuto received his A.S. from Western Connecticut State University.

CLASS I DIRECTORS SERVING A TERM EXPIRING AT THE 2005 ANNUAL MEETING

Howard C. Birndorf, age 54

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 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, age 61

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 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.

#### CLASS II DIRECTORS SERVING A TERM EXPIRING AT THE 2006 ANNUAL MEETING

Stelios B. Papadopoulos, age 63

Mr. Papadopoulos has been a director of Nanogen since October 1999. He retired in September 2001 from CN Biosciences, Inc, an affiliate of Merck KGaA, Darmstadt, Germany. From January 2001 to September 2001, Mr. Papadopoulos served as Chief Executive Officer and a director of CN Biosciences, Inc. or 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 is 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, age 44

Mr. Schreiber has been a director of Nanogen since June 2003. 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.

#### **Board Meetings and Committees**

The Board of Directors held eight meetings during 2003. 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.

#### **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 <a href="https://www.nanogen.com">www.nanogen.com</a>. 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 therefor on our website at <a href="https://www.nanogen.com">www.nanogen.com</a>.

#### **Independence of the Board of Directors**

Our Board of Directors has determined that each of our directors, except for Mr. Birndorf, our Chairman of the Board and Chief Executive Officer, is independent within the meaning of the applicable Nasdaq listing standards.

### **Board Committees**

The Board of Directors has established a Compensation Committee, an Audit Committee, and a Nominating, a 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 <a href="https://www.nanogen.com">www.nanogen.com</a> under our Investor Relations section.

Compensation Committee. The current members of the Compensation Committee are Val Buonaiuto and David Schreiber, each of whom is independent within the meaning of applicable Nasdaq listing standards. The Compensation Committee held four meetings during 2003. The Compensation Committee s functions are to (i) discharge the Board of Director s 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, each of whom is independent within the meaning of applicable Nasdaq listing standards and SEC rules. The Audit Committee held seven meetings during 2003. 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 therefrom, 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. The Board of Directors has determined that Mr. Papadopoulos is an audit committee financial expert as defined in SEC rules.

*Nominating, Governance and Ethics Committee*. The current members of the Nominating, Governance and Ethics Committee are Val Buonaiuto, David Schreiber, Stelios B. Papadopoulos and Robert E. Whalen, each of

whom is independent within the meaning of applicable Nasdaq listing standards. The Nominating, Governance and Ethics Committee held one meeting in 2003.

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, stockholders should submit the candidates names and appropriate background and biographical information 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 consider the candidates substantially in the same manner as it considers as it considers other Board Candidates.

The Nominating, Governance and Ethics Committee reviews the qualifications of various persons 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.

#### 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. Three directors attended the Company s 2003 annual meeting of stockholders.

#### SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS, DIRECTORS AND MANAGEMENT

The following table sets forth information as of April 1, 2004 (except as noted below) as to shares of Common Stock of the Company beneficially owned by (i) each of the Company s directors, (ii) each of the executive officers of the Company named in the Summary Compensation Table set forth herein, (iii) the current directors and executive officers of the Company as a group and (iv) each person known by the Company to be the beneficial owner of more than 5% of the outstanding shares of Common Stock of the Company.

Beneficiai	Ownersnip

	of Comn	non Stock
	Number of Shares(1)	Percentage of Class(2)
Citigroup, Inc. and Affiliates(3)	3,246,214	10.40%
399 Park Avenue		
New York, NY 10043		
Sage Capital Growth, Inc. and Affiliate(4)	1,875,000	6.01%
660 Madison Avenue, 18th Floor		
New York, NY 10021		
Howard C. Birndorf(5)	1,657,588	5.19%
c/o Nanogen, Inc.  10398 Pacific Center Court		
San Diego, CA 92121		
Val Buonaiuto(6)	10,000	*
David G. Ludvigson(7)	270,401	*
Bruce Huebner(8)	203,645	*
Graham Lidgard, Ph.D.(9)	85,332	*
Robert Whalen(10)	19,162	*
Stelios Papadopoulos(11)	43,142	*
David Schreiber	2,142	*
David Macdonald	0	*
All directors and executive officers as a group (9 persons)(12)	2,298,591	7.07%

<sup>\*</sup> Less than one percent.

<sup>(1)</sup> To the Company s knowledge, the persons named in the table have sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by them, subject to community property laws where applicable and except as indicated below. Ownership information is based upon information furnished by the respective individuals or entities, as the case may be.

<sup>(2)</sup> For purposes of computing the percentage of outstanding shares held by each person or group of persons named above on a given date, shares which such person or group has the right to acquire within 60 days after such date are deemed to be outstanding, but are not deemed to be outstanding for the purposes of computing the percentage ownership of any other person. As of April 1, 2004, there were 31,209,615 shares of Common Stock outstanding.

(3) Pursuant to a Schedule 13G/A filed on February 13, 2004 with the SEC, Citigroup Global Markets Inc. ( CGM ) and Citigroup Financial Products Inc. ( CFP ) each claimed it had shared voting power and shared dispositive power over 2,116,105 shares of common stock, Citigroup Global Markets Holdings Inc. ( CGM Holdings ) claimed it had shared voting power and shares dispositive power over 3,171,165 shares of common stock, and Citigroup Inc. ( Citigroup ) claimed it had shares voting power and shared dispositive power over 3,246,214 shares of common stock. CGM, CFP, CGM Holdings and Citigroup each

- reported that the respective shares listed for each respective entity includes shares for which each such reporting entity disclaims beneficial ownership. CFP is the sole stockholder of CGM, CGM Holdings is the sole stockholder of CFP. Citigroup is the sole stockholder of CGM Holdings.
- (4) Pursuant to a Schedule 13G filed on March 5, 2004 with the SEC, Sage Capital Growth, Inc. and Mainfield Enterprises, Inc. each claimed it had shared voting power and shared dispositive power over 1,875,000 shares of common stock. Pursuant to an investment management agreement between Sage Capital Growth and Mainfield Enterprises, Sage Capital Growth has the power to sell or vote on behalf of Mainfield Enterprises some of all of the 1,875,000 shares of common stock.
- (5) Includes 741,336 shares issuable upon the exercise of options within 60 days of April 1, 2004.
- (6) Includes 10,000 shares issuable upon the exercise of options within 60 days of April 1, 2004.
- (7) Includes 225,541 shares issuable upon the exercise of options within 60 days April 1, 2004.
- (8) Includes 203,645 shares issuable upon the exercise of options within 60 days of April 1, 2004.
- (9) Includes 83,332 shares issuable upon the exercise of options within 60 days of April 1, 2004.
- (10) Includes 13,020 shares issuable upon the exercise of options within 60 days of April 1, 2004.
   (11) Includes 37,000 shares issuable upon the exercise of options within 60 days of April 1, 2004.
- (12) Includes four Board members, four current executive officers, and one former executive officer

#### COMPENSATION OF EXECUTIVE OFFICERS AND DIRECTORS

#### **Executive Officers**

The names of and certain biographical information of the Company s current executive officers are as follows:

Name	Age	Position
Howard C. Birndorf	54	Chairman and Chief Executive Officer
Bruce A Huebner	53	President and Chief Operating Officer
David Ludvigson	53	Executive Vice President, Chief Financial Officer and Treasurer
Graham Lidgard, Ph.D	55	Senior Vice President, Research and Development
William L. Respess	64	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 was a founding director of Graviton, Inc., a wireless sensor company 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.

Bruce Huebner. Mr. Huebner joined Nanogen full-time in December 2002 as President and Chief Operating Officer. He had been a consultant to Nanogen since September 2002. Prior to joining Nanogen, Mr. Huebner served approximately ten years at Gen-Probe, his final six years at Gen-Probe as its executive vice president and chief operating officer. While under Mr. Huebner s direction, Gen-Probe introduced multiple new products as well as grew its annual revenues to over \$130 million. He has over thirty years of work experience in the diagnostics industry which also includes various leadership roles at organizations such as Hybritech and Roche Diagnostics. Mr. Huebner received his B.S. in Chemistry from the University of Wisconsin.

David G. Ludvigson. 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., 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 Argonaut Technologies, Inc. and Kiyon, Inc. Mr. Ludvigson received a B.S. and an M.A.S. from the University of Illinois.

Graham Lidgard, Ph.D. Dr. Lidgard joined Nanogen 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 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 and held several positions with Corning Medical/Ciba Corning 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. Respess, Ph.D., J.D. Dr. Respess joined Nanogen 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, Senior Vice President and General Counsel of Ligand Pharmaceuticals Incorporated, Vice President and General Counsel of Gen-Probe Incorporated, Vice President and General Counsel of Hybritech Incorporated 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. Respess 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 the Company s Chief Executive Officer and each of the four other most highly compensated executive officers of the Company whose salary and bonus for the 2003 fiscal year was in excess of \$100,000, for services rendered in all capacities to the Company and its subsidiaries for the fiscal years ended December 31, 2001, 2002 and 2003. No other executive officers who would have otherwise been includable in such table on the basis of salary and bonus earned for the 2003 fiscal year has 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.

## **Summary Compensation Table**

		Annual Compensation			Long-Term Compensation Awards			
					Restricted	Securities	A	All Other
Name and Principal				Other Annual	Stock	Underlying	Con	npensation
Position	Year	Salary(\$)	Bonus(\$)	Compensation (\$)	Awards(\$)	Options(#)	_	(\$)(1)
Howard C. Birndorf	2003	\$ 420,000	\$ 67,000(2)			325,000	\$	46,171(3)
Chief Executive Officer	2002 2001	\$ 385,000 \$ 365,000	\$ 100,000(4) \$ 345,000(4)		\$ 222,938(5)	550,000 150,000	\$ \$	83,318(3) 208,242(3)
Bruce A. Huebner	2003 2002	\$ 253,000 \$ 20,833(6)				162,500 375,000	\$ \$	1,260 1,242
President and Chief								
Operating Officer								
David G. Ludvigson,  Executive Vice	2003	\$ 167,000(7)	\$ 40,000(12)			265,000(8)	\$	8,074(9)

President, Chief					
Financial Officer and					
Treasurer					
David Macdonald	2003	\$ 220,000		50,000	\$ 702
	2002	\$ 136,538(10)	\$ 20,000	125,000	\$ 468
Former Senior Vice					
President, Operations					
Graham Lidgard,	2003	\$ 204,000(11)		225,000	\$ 1,750
Ph.D. Senior Vice					
President, Research and					
Development					

<sup>(1)</sup> Includes in 2003 \$2,171, \$1,260, \$324, \$702 and \$1,750 of calculated imputed income attributed to Mr. Birndorf, Mr. Huebner, Mr. Ludvigson, Mr. Macdonald and Mr. Lidgard, respectively, in connection with excess group term life insurance. Includes in 2002 \$1,242, \$1,242 and \$468 of calculated imputed income attributed to Mr. Birndorf, Mr. Huebner and Mr. Macdonald, respectively, in connection with excess group term life insurance. Includes in 2001 \$1,542 of calculated imputed income attributed to Mr. Birndorf in connection with excess group term life insurance.

- (2) Represents the accrued portion of a guaranteed annual bonus of \$100,000, which was eliminated in July 2003.
- (3) Amount includes \$44,000, \$82,076 and \$206,700 for the years ended December 31, 2003, 2002 and 2001, respectively, of payments received from a local charter aircraft company related to the Company s use of Mr. Birndorf s aircraft for business related travel. For further information concerning the arrangement see Certain Transactions below.
- (4) \$100,000 was paid pursuant to a guaranteed annual bonus.
- (5) During 1999, Mr. Birndorf was issued 50,000 unvested shares of Common Stock for which he paid \$50.00, the par value of the shares. The market price of the shares on the award date was \$7.25 per share. During 2001, all 50,000 shares became vested and Mr. Birndorf sold 36,250 of these shares for a gain of \$222,938
- (6) Mr. Huebner joined the Company as an employee in December 2002, and his salary for 2002 reflects a partial year of service.
- (7) Mr. Ludvigson joined the Company as an employee in May 2003, and his salary for 2003 reflects a partial year of service.
- (8) 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.
- (9) Represents 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.
- (10) Mr. Macdonald joined the Company in April 2002, and his salary for 2002 reflects a partial year of service. His employment with the Company was terminated in January 2004.
- (11) Mr. Lidgard joined the Company in January 2003, and his salary for 2003 reflects a partial year of service.
- (12) Represents a one-time sign-on bonus.

#### Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information as of December 31, 2003 with respect to shares of the Company s Common Stock that may be issued under the Company s existing equity compensation plans.

#### **Plan Category**

Total

	A. B.		Number of Shares Remaining Available for
	Number of Shares to be Issued Upon Exercise of Outstanding Options	Weighted Average Exercise Price of Outstanding Options	Future Issuance (Excluding Securities Reflected in Column A)
Equity compensation plans approved by stockholders(1) Equity compensation plans not approved by stockholders	4,861,366(2)	\$ 6.13	876,902(3)

(1) Consists solely of the Nanogen, Inc. 1998 Employee Stock Purchase Plan (the Purchase Plan ), the Nanogen, Inc. Stock Bonus Plan (the Bonus Plan ) and the Company s three stock option plans: the 1993 Stock Option Plan, the 1995 Stock Option/Stock Issuance Plan, and the 1997 Stock Incentive Plan.

4,861,366

- (2) Excludes purchase rights accruing under the Purchase Plan which has a shareholder approved reserve of 450,000 shares. Under the 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 Purchase Plan, the Bonus Plan, the 1993 Stock Option Plan, the 1995 Stock Option/Stock Issuance Plan, and the 1997 Stock Incentive Plan. As of December 31, 2003, 87,640 shares were available for issuance under the Purchase Plan, 178,390 shares were available for issuance under the Bonus Plan, and 0, 0, and 610,872 shares were available for issuance under the 1993 Stock Option Plan, the 1995 Stock Option/Stock Issuance Plan, and the 1997 Stock Incentive Plan, respectively. The 610,872 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 restricted stock issuances or 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 share issuances which vest upon the attainment of prescribed performance milestones or the completion of designated service periods.

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

Effective as of June 3, 2001, the Company entered into an employment agreement with Howard C. Birndorf relating to his employment as Executive Chairman of the Company. 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

C.

876,902

6.13

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 and all of the outstanding stock options granted to him on or before January 26, 2001 will vest in full. In the event Mr. Birndorf s employment with the Company 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 a six months of salary continuation. In the event of Mr. Birndorf 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 under the disability insurance policy maintained by the Company. 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 the Company or hire or solicit any employee or exclusive consultant of the Company.

Effective as of December 1, 2002, and January 24, 2003 the Company entered into an employment agreement with Bruce A. Huebner and Graham Lidgard, respectively. The term of each agreement is three (3) years, subject to automatic renewal for successive additional three (3) year terms. In the event the agreement is not renewed, the executive will become entitled to salary continuation payments for a period of 6 months. Pursuant to their respective agreements, Mr. Huebner will receive an annual base salary of \$250,000 and Mr. Lidgard will receive an annual base salary of \$210,000, in each case subject to adjustment annually. Mr. Huebner and Mr. Lidgard will also be entitled to a bonus of up to 55% and 50%, respectively, of their base salary contingent upon the Company s 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, Mr. Huebner will receive a Transaction Bonus in an amount equal to 100% of his annual base salary, and Mr. Lidgard will receive a Transaction Bonus in an amount equal to 50% of his annual base salary; and all outstanding options held by each of them 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 either Mr. Huebner or Mr. Lidgard in connection with such a change in control or other significant event will be in lieu of any Achievement Bonus to which such individual might otherwise become entitled for the year in which such Transaction Bonus is paid. Each executive 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 the executive 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 maintained by the Company. During any period in which salary continuation payments are being made to either executive, that executive has agreed not to engage in any business activity that is competitive with the Company or hire or solicit any employee or exclusive consultant of the Company.

On January 23, 2003, the Company entered into an employment agreement with Mr. Macdonald. The agreement provided for an annual base salary of \$220,000, subject to adjustment annually, and additional incentive compensation of up to 50% of Mr. Macdonald s base salary contingent upon the Company s achievement of performance goals determined annually by the Board. Mr. Macdonald s employment with the Company terminated in January 2004, and pursuant to the terms of his employment agreement, Mr. Macdonald received six months severance pay. In consideration for such severance payment, Mr. Macdonald agreed that during the 6 month period in which he receives severance compensation, he shall not engage in any business activity that is competitive with the Company or hire or solicit any employee or exclusive consultant of the Company.

Effective May 1, 2003 the Company entered into an employment agreement with Mr. Ludvigson as Executive Vice President, Chief Financial Officer and Treasurer. The agreement provides for an annual base 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, 25% of which is based solely on the discretion of the Board and 25% of which is contingent upon the Company s achievement of performance goals determined annually by the Board. Mr. Ludvigson received an option to purchase up to 140,000 shares of the Company s Common Stock at a purchase price of \$3.45. The option vests monthly over a 1 year period, and shall become fully vested upon a change of control of the Company.

In the event any payment or benefit provided to under the Company s 1997 Stock Incentive Plan to any individual would be 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**

In April 2003, both the Compensation Committee of the Board and the Board itself approved a revised compensation program for Board members which became effective after the Annual Stockholders Meeting held on June 12, 2003. As a result, each non-employee Board member will receive an annual retainer of \$25,000 to be paid entirely in shares of the Company s Common Stock, based on the closing stock price on the date of the Company s Annual Meeting of Stockholders, and an annual retainer of \$1,500, to be paid entirely in cash, for each Board committee on which he or she serves. The Chairman of the Audit and Compensation Committees receive an additional annual 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 by phone. Pursuant to the 1997 Stock Incentive Plan, each non-employee Board member may elect to receive his or her annual retainer payments and/or meeting fees from the Company in the form of cash, non-qualified stock options, restricted stock, stock units, or a combination thereof.

Upon initial appointment or election to the Board, a non-employee director will receive an option grant to purchase 25,000 shares of the Company's Common Stock at an exercise price equal to the fair market value of the option shares on the grant date. The option will vest as to 25% of the option shares upon completion of one year of Board service measured from the grant date and will vest as to the balance of the option shares over the next 36 months of continued Board service. The vesting of the option shares will accelerate if there is a Change of Control as defined in the plan. Mr. Schreiber received a 25,000 share option grant in June 2003 upon his appointment to the Board. The option has an exercise price per share equal to \$4.07, the fair market value of the Common Stock on the option grant date. No other non-employee Board members received stock option grants in the 2003 year.

In the event any payment or benefit provided to under the Company s 1997 Stock Incentive Plan to any Board member would be 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 Committee Interlocks and Insider Participation**

The following individuals served as members of the Company s Compensation Committee during 2003: David Ludvigson, Val Buonaiuto and David Schreiber. Mr. Ludvigson was a member of the Compensation Committee until his appointment as an executive officer of the Company

on May 8, 2003. Mr. Schreiber joined the Compensation Committee on June 12, 2003.

#### **Stock Options**

The following tables summarize option grants to and exercises by the Company s Named Executive Officers during fiscal 2003, and the value of the options held by such persons at the end of fiscal 2003. The Company does not grant stock appreciation rights (SARs).

#### **Option Grants in Fiscal 2003**

#### **Individual Grants**

	Number of	Percent of Total Options	_		at Assumed of Stock Ap	ealizable Value Annual Rates opreciation for a Term(3)
	Securities	Granted to	F			
	Underlying	Employees in	Exercise or			
	Options Granted	Fiscal Year	Base Price	Expiration		
	(#)	2003(1)	(\$/sh)(2)	Date	5%(\$)	10%(\$
Howard C. Birndorf	325,000(6)	16.94%	\$ 3.45	7/18/2013	\$ 705,148	\$ 1,786,983
Bruce A. Huebner	162,500(6)	8.47%	\$ 3.45	7/18/2013	\$ 352,574	\$ 893,491
David Ludvigson	265,000(5)	13.81%	\$ 3.45	7/18/2013	\$ 574,966	\$ 1,457,079
Graham Lidgard, Ph.D	125,000(4)	6.51%	\$ 1.72	1/14/2013	\$ 135,212	\$ 342,654
Graham Lidgard, Ph.D	100,000(6)	5.21%	\$ 3.45	7/18/2013	\$ 216,968	\$ 549,841
David Macdonald	50,000(6)	2.60%	\$ 3.45	7/18/2013	\$ 108,484	\$ 274,920

- (1) Based on 1,918,100 options granted during the fiscal year ended December 31, 2003.
- (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 the Company's 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 four-year period, with a one-year cliff.
- (5) Includes 140,000 options that vest monthly over a twelve-month period, and 125,000 options that vest over a two-year period, with a six-month cliff
- (6) Options vest over a two-year period with a six-month cliff

## Aggregated Option Exercises in Fiscal 2003 and Value of Options

## At End of Fiscal 2003

Name	Shares Acquired	Value Realized-	Number of Securities	Value of Unexercised
	On Exercise	(\$)(1)	Underlying Unexercised	In-the-Money
			Options at End of Fiscal	Options at End of

	2003 (#)	Fiscal 2003(\$)(2)	
	Exercisable/Unexercisable	Ex	xercisable/Unexercisable
Howard C. Birndorf	717,871/532,129(3)	\$	2,791,639/\$2,767,410
Bruce A. Huebner	81,250/456,250	\$	570,375/\$2,958,125
David Ludvigson	138,333/183/333	\$	595,434/\$1,019,331
Graham Lidgard	0/225,000	\$	0/\$1,467,250
David Macdonald	61,404/113,596	\$	386,563/\$660,161

<sup>(1)</sup> 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.

<sup>(2)</sup> The value of unexercised options is (i) the fair market value of the Company s Common Stock on December 31, 2003 (\$9.01 per share), less the option exercise price of in-the-money options, multiplied by (ii) the number of shares underlying such options.

<sup>(3)</sup> Mr. Birndorf agreed to a voluntary cancellation of his option to purchase 200,000 shares of Common Stock at an exercise price of \$45,813, accordingly such option shares are not included in the number of securities underlying options.

#### COMPENSATION COMMITTEE REPORT ON EXECUTIVE COMPENSATION

The Compensation Committee of the Board of Directors of the Company (the Compensation Committee ) is pleased to present its report on executive compensation. This report is provided by the Compensation Committee to assist stockholders in their understanding of the Compensation Committee s objectives and procedures in establishing the compensation package of the Company s executive officers and describes the basis on which compensation determinations for fiscal year 2003 were made by the Compensation Committee. In making its determination, the Compensation Committee has relied, in part, on geographic and competitive considerations, independent surveys of compensation of management of companies in the biotechnology industry, including companies included in the Nasdaq Pharmaceutical Stock Index used in the Company s Stock Price Performance Graph set forth in this proxy statement, and recommendations of management.

### **Compensation Philosophy And Objectives**

The Compensation Committee believes that compensation packages for the Company s executive officers should:

Encourage creation of stockholder value and achievement of strategic corporate objectives.

Integrate compensation with the Company s annual and long-term corporate objectives and strategy, and focusexecutive behavior on the fulfillment of those objectives.

Recognize individual initiative, effort and accomplishment.

Provide a competitive total compensation package that enables the Company to attract and retain, on a long-termbasis, high caliber personnel.

Provide a total compensation opportunity that is competitive with companies in the biotechnology industry, taking into account relative company size, stage of development, performance and geographic location as well as individual responsibilities and performance.

Align the interests of management and stockholders and enhance stockholder value by providing management with longer-term incentives through equity ownership by management.

### **Key Elements Of Executive Compensation**

The Compensation Committee s policy is to compensate executive officers based, in part, on the achievement of Company objectives established with the Board of Directors, the individual contributions and achievements of each executive officer and the financial position of the Company. 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 in cash and tied to the achievement of individual and Company performance goals and (iii) and stock options and other equity awards designed to strengthen the mutuality of interests between the executive officers and the Company s stockholders.

#### Base Salary

Salary levels for the executive officers are largely determined through comparisons with salaries in effect at companies of similar size and complexity in the biotechnology industry and companies with which the Company competes for key personnel. The base salaries of the Company s executive officers for fiscal year 2003 were at the higher end of the range of companies reviewed. In establishing the base salaries for the 2003 fiscal year, the Compensation Committee considered, among other things, the Company s success in advancing its products and accomplishing other business objectives, and the individual contributions and achievements of each executive officer. The actual base salary for each executive officer is based on an evaluation of his or her job responsibilities, comparisons of salary levels in effect for comparable positions at the surveyed companies, the achievement of Company objectives and individual performance. Individual performance is evaluated by

reviewing organizational and management development progress against individual contributions and achievements and the degree to which teamwork and Company values are fostered. The base salaries established for the executive officers for fiscal year 2003 were competitive within a range that the Compensation Committee considered to be reasonable and necessary.

#### Ronus

The annual target incentive bonus for the Chief Executive Officer and each Named Executive Officer is based on a percentage of his base pay (up to 60% for the Chief Executive Officer, up to 55% for the President, and up to 50% for each remaining Named Executive Officer) but is adjusted by the Compensation Committee to reflect both the achievement of Company performance objectives and the each individual officer s contributions to the achievement of those objectives. The Compensation Committee did not award discretionary bonuses for the 2003 fiscal year to any executive officers and awarded only limited cash bonuses to certain key non-executive vice president and director-level employees.

#### Long Term Incentives

The Compensation Committee, believes that by providing those persons who have substantial responsibility for the management and growth of the Company with an opportunity to increase their ownership of the Company s stock, the best interests of stockholders and executives will be closely aligned. Therefore, executive officers, as well as all employees, are eligible to receive stock awards from time to time, including stock options, restricted stock grants, restricted stock units and stock appreciation rights. Awards are generally made in the form of stock options giving the recipient the right to purchase shares of Common Stock of the Company at a specified price. The number of shares of the Company s stock subject to stock options granted to executive officers, including the Chief Executive Officer, is based on the Company performance and the individual s contribution to that performance as well as his or her own individual performance and a review of data on the range of aggregate annual option grants (as compared to the number of shares of outstanding stock) for officers with similar duties and titles at biotechnology companies, taking into account differences in stock prices of those companies, their stage of development, achievements and the like.

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

Howard C. Birndorf, the Company s Chief Executive Officer received \$420,000 in base salary during fiscal year 2003, plus a guaranteed bonus payment of \$67,000. In July 2003, Mr. Birndorf s annual rate of base salary was changed to \$485,000, and his guaranteed bonus of \$100,000 was eliminated. In maintaining his annual rate of base compensation, the Compensation Committee recognized that Mr. Birndorf s effort was important in advancing the development and growth of the Company and the corporate objectives achieved in 2002 and 2003. The Committee determined that these accomplishments were critical to the Company s future growth and potential enhancement of stockholder value and compensated Mr. Birndorf for his effort on behalf of the Company accordingly. The Compensation Committee also reviewed the results of a survey of the salary levels in effect for executive officers of similar companies in the biotechnology industry. Based on the Company s corporate performance in 2002, Mr. Birndorf received no discretionary bonus for that 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.

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

Section 162(m) of the Internal Revenue Code disallows a 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 2003 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 2004 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. The Compensation Committee believes that in establishing the equity incentive compensation programs for the Company s 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 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 Company s 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**

Val Buonaiuto, Chairman

David Schreiber

#### REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

The following is the report of the Audit Committee of the Board of Directors. The information contained in this report shall not be deemed to be soliciting material or to be filed with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act or Exchange Act, except to the extent that the Company specifically incorporates it by reference into such filing.

In accordance with its written charter adopted by the Board of Directors, the Audit Committee assists the Board of Directors in fulfilling its responsibility for oversight of the quality and integrity of the accounting, auditing and financial reporting practices of the Company. The Company s management has responsibility for the preparation of the Company s financial statements and the independent auditors have responsibility for performing an independent audit of the Company s financial statements and issuing a report thereon.

The Audit Committee received from the Company s independent auditors and reviewed a formal written statement, consistent with Independence Standards Board Standard No. 1, Independence Discussions with Audit Committees, which describes all relationships between the auditors and the Company that, in the auditors professional opinion, might reasonably be thought to bear on the auditors independence. The Audit Committee discussed with the auditors these relationships and the auditors independence.

The Audit Committee reviewed the audited financial statements of the Company as of and for the fiscal year ended December 31, 2003, with management and the independent auditors. In addition, the Audit Committee also discussed and reviewed with the independent auditors all communications required by generally accepted auditing standards, including those described in Statement on Auditing Standards No. 61, as amended, Communication with Audit Committees and, with and without management present, discussed and reviewed the results of the independent auditors examination of the Company s financial statements.

Based on the foregoing review and discussions with management and the independent auditors, the Audit Committee recommended to the Board that the Company s audited financial statements be included in its Annual Report on Form 10-K for the fiscal year ended December 31, 2003, for filing with the Securities and Exchange Commission.

## **Audit Committee**

Stelios B. Papadopoulos, Chairman

David Schreiber

Robert E. Whalen

#### STOCK PRICE PERFORMANCE GRAPH

The following graph shows the total stockholder return of an investment of \$100 in cash on April 14, 1998, the date Nanogen s Common Stock began publicly trading on the NASDAQ National Market, through December 31, 2003 for (i) Nanogen s Common Stock, (ii) the CRSP Total Return Index for The Nasdaq Stock Market (U.S. and Foreign) (the Nasdaq Composite Index) and (iii) the CRSP Total Return Index for Nasdaq Pharmaceutical Stocks (the Nasdaq Pharmaceutical 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.

	Nanogen, I	nc. Naso	daq Composite Index	Phar	Nasdaq maceutical Index
12/31/98	\$ 100.0	00 \$	100.000	\$	100.000
12/31/99	\$ 546.8	75 \$	186.387	\$	188.554
12/31/00	\$ 225.0	00 \$	112.469	\$	235.194
12/31/01	\$ 144.2	50 \$	88.667	\$	200.439
12/31/02	\$ 38.7.	50 \$	61.438	\$	129.497
12/31/03	\$ 225.2	50 \$	92.517	\$	189.847

#### CERTAIN TRANSACTIONS

Mr. Birndorf owns an aircraft which is leased by a local charter aircraft company. For the year ended December 31, 2003, the Company paid approximately \$82,000 to the local charter aircraft company for the Company s use of Mr. Birndorf s aircraft for business related travel. Mr. Birndorf receives \$1,250 per hour of usage when his aircraft is leased to outside parties, including the Company. Mr. Birndorf received \$44,000 for the year ended December 31, 2003 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.

In March 1998, Kieran T. Gallahue, former President of the Company, purchased 133,332 shares of the Company s Common Stock at \$3.00 per share. In connection with this purchase, the Company loaned \$399,800 to Mr. Gallahue at an interest rate of 5.61% per annum pursuant to a five-year full recourse promissory note, which note is secured by Mr. Gallahue s respective shares purchased. In April 1998, the Company loaned Mr. Gallahue \$40,000 pursuant to a four-year promissory note in connection with his relocation to San Diego. The loan, which bore interest at 6.01% per annum and was secured by a deed of trust, is forgivable by the Company over four years. On January 2, 2003, Mr. Gallahue tendered 133,332 shares of the Company s Common Stock back to the Company valued at \$211,998. The Company made a one time net payment of approximately \$384,000 in January 2003 to settle all outstanding obligations between the two parties, including indebtedness to the Company amounting to approximately \$300,000.

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, 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.

#### 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 1,100,000 shares to 8,858,760 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, 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 February 13, 2004, 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. No individual may receive options or stock appreciation rights covering more than 750,000 shares in any calendar year. 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 15, 2004, approximately 154 employees (including 5 executive officers) and consultants and 4 non-employee board members were eligible to participate in the 1997 Stock Plan.

The Board may at any time amend or terminate the 1997 Stock Plan, subject to 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 limited to 8,858,760 shares, including the 1,100,000 share increase that stockholders are being asked to approve pursuant to this Proposal 2. Should any unvested shares issued under the 1997 Stock Plan 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, 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, 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 15, 2004, 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 1,737,496 shares; Mr. Huebner options for 537,500 shares; Mr. Ludvigson options for 321,666 shares; Mr. Macdonald options for 175,000 shares; and Dr. Lidgard options for 225,000 shares; (ii) all current executive officers of the Company as a group: options for 2,996,662 shares; (iii) all current directors who are not executive officers as a group: options for 160,000 shares; (iv) Mr. Buonaituo, the nominee for Class III director: options for 55,000 shares; (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 and consultants of the Company, options for 11,951,031 shares.

As of April 15, 2004, 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 50,000 shares; (ii) all current executive officers of the Company as a group: 50,000 shares; (iii) all current directors who are not executive officers as a group: 24,568 shares; (iv) the nominee for Class III director: Mr. Buonaituo 6,142 shares; (v) each associate of any of such current directors, executive officers or nominee: 0 shares; (vi) each person who has received five percent of options granted other than those included above: 0 shares; and (vii) all employees and consultants of the Company: approximately 50,000 shares.

As of April 15, 2004 options covering 3,585,842 shares of Common Stock were outstanding under the 1997 Stock Plan, 94,568 shares had been issued pursuant to restricted stock or stock unit awards, 3,214,825 shares have been issued pursuant to the exercise of outstanding options under the 1997 Stock Plan, and 1,963,525 shares remained available for future award and issuance (assuming stockholder approval of the increase which forms part of this Proposal).

On April 15, 2004, the closing price of the Company s Common Stock on the Nasdaq National Market was \$8.06 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 1,100,000 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.

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. A participant may not receive SARs covering more than 300,000 shares of Common Stock within one calendar year. 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.

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.

## Share Awards

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 on whether 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.

## **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 if the shares have been 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 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 if the shares are held for at least one year following exercise.

The Company does not receive a deduction for this gain.

## **Accounting Treatment**

Under the accounting principles currently in effect, options granted under the 1997 Stock Plan with an exercise price equal to the fair market value of the shares on the grant date will not result in any direct charge to the Company s reported earnings. However, the fair value of those options is required to be disclosed in the notes

to the Company s financial statements, and the Company must also disclose, in footnotes to the financial statements, the pro-forma impact those options would have upon the Company s reported earnings were the fair value of those options at the time of grant treated as a compensation expense.

Option grants made under the 1997 Plan with exercise prices less than the fair market value of the shares on the grant date will result in a direct compensation expense to the Company in an amount equal to the excess of such fair market value over the exercise price. The expense must be amortized against the Company searnings over the period that the option shares are to vest.

Option grants made to non-employee consultants (but not non-employee members of the Board of Directors) will result in a direct charge to the Company's reported earnings based upon the fair value of the option measured initially as of the grant date and then subsequently on the vesting date of each installment of the underlying option shares. Such charge will accordingly include the appreciation in the value of the option shares over the period between the grant date of the option and the vesting date of each installment of the option shares.

The number of outstanding options will be a factor in determining the Company s earnings per share on a fully-diluted basis.

Should one or more individuals be granted SARs under the 1997 Stock Plan, then such rights would result in a compensation expense to be charged against the Company s reported earnings. Accordingly, at the end of each fiscal quarter, the amount, if any, by which the fair market value of the shares of Common Stock subject to such outstanding SARs has increased from the prior quarter-end would be accrued as compensation expense, to the extent such fair market value is in excess of the aggregate exercise price in effect for those rights.

Direct stock issuances under the 1997 Stock Plan will result in a direct charge to the Company s reported earnings equal to the excess of the fair market value of the shares on the issuance date over the cash consideration (if any) paid for such shares. If the shares are unvested at the time of issuance, then any charge to the Company s reported earnings will be amortized over the vesting period. However, if the vesting of the shares is tied solely to performance milestones, then the issuance of those shares will be subject to mark to market accounting, and the Company will have to accrue compensation expense not only for the value of the shares on the date of issuance but also for all subsequent appreciation in the value of those which occurs prior to the vesting date. Similar accounting treatment will be in effect for any restricted stock units issued under the 1997 Stock Plan.

On March 31, 2004, the Financial Accounting Standards Board (FASB) issued an exposure draft of its Proposed Statement of Financial Accounting Standards for Share-Based Payments (the Exposure Draft), which, if approved by FASB without change, will substantially change the accounting treatment for the 1997 Stock Plan beginning January 1, 2005. Pursuant to the Exposure Draft, the fair value of each stock option and SAR which is granted or vests under the 1997 Stock Plan on or after January 1, 2005 will be charged as a direct compensation expense to the Company s reported earnings over the vesting period of that stock option or SAR. The fair value of each stock option or SAR will be determined as of its grant date under an appropriate valuation formula. The accounting treatment for restricted stock or restricted stock units will remain substantially the same as under the current accounting rules summarized above.

## **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 1,100,000 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.

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### 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 150,000 shares from 450,000 shares to 600,000 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. In February 2004, 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 450,000 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 450,000 to 600,000. 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 15, 2004, 362,360 shares of the Company s Common Stock have been sold under the Purchase Plan and 87,640 shares of Common Stock remain available for purchase under the Purchase Plan.

As of April 15, 2004 the fair market value of a share of the Company s Common Stock was \$8.06.

## 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 15, 2004, the Company had approximately 150 employees who were eligible to participate in the Purchase Plan, including 4 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.

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 withdrawal 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 officering 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 right to undertake a dissolution, liquidation, merger, consolidation or other reorganization.

#### **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, 2003 purchase date.

#### **Purchase Plan Transactions**

Number of

Name	Title	Purchased Shares
Howard C. Birndorf	Chief Executive Officer	0
Bruce A. Huebner	President and Chief Operating Officer	0
David G. Ludvigson	Executive VicePresident, Chief Financial Officer and Treasurer	1,666
David Macdonald	Former Senior Vice President, Operations	3,209
Graham Lidgard, Ph.D.	Senior Vice President, Research and Development	0
All current executive officers as a group (1 person)		1,666
All employees, including current officers who are not executive officers, as a group (50 persons)		360,694

### **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 150,000 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 anti-dilution 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.

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.

## **Accounting Treatment**

Under the accounting principles currently applicable to employee stock purchase plans qualified under Section 423 of the Internal Revenue Code, the issuance of Common Stock under the Purchase Plan will not result in a compensation expense chargeable against our reported earnings. However, we must disclose, in pro-forma statements to our financial statements, the impact the purchase rights granted under the Purchase Plan would have upon our reported earnings were the value of those purchase rights treated as compensation expense.

On March 31, 2004 the Financial Accounting Standards Board (FASB) issued an exposure draft of its Proposed Statement of Financial Accounting Standards for Share-Based Payments (the Exposure Draft), which, if approved by FASB without change, will substantially change the accounting treatment for the Purchase Plan beginning January 1, 2005. Pursuant to the Exposure Draft, the fair value of each purchase right which is granted or vests under the Purchase Plan on or after January 1, 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 150,000 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.

#### PROPOSAL 4

#### RATIFICATION OF INDEPENDENT AUDITORS

The Audit Committee has appointed the firm of Ernst & Young LLP ( Ernst & Young ) as the Company s independent auditors for the fiscal year ended December 31, 2004. Stockholder ratification of the appointment of 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 Fees.** Total audit fees billed by Ernst & Young for fiscal years ended 2003 and 2002, including fees for professional services and expense relating to the audit of the Company s consolidated financial statements, fees related to the review of the Company s quarterly financial information, as well as fees related to the Company s registration statements filed with the SEC, totaled \$144,740 and \$99,548, respectively.

**Audit Related Fees.** Total audit related fees billed by Ernst & Young for the fiscal years ended December 31, 2003 and 2002, including consultations regarding accounting issues and due diligence in connection with proposed acquisitions totaled \$143,360 and \$46,975, respectively.

Tax Fees. There were no tax fees incurred for the fiscal years ended December 31, 2003 or 2002.

**All Other Fees.** All other fees billed by Ernst & Young for services rendered during the fiscal years ended December 31, 2003 and 2002 totaled \$3,000 in each year and consisted of annual license fees for access to an on-line database of accounting and auditing literature.

## **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.

In 2003, there were no fees paid to Ernst & Young under the de minimus exception to SEC the rules that waives pre-approval for certain non-audit services.

The Board of Directors recommends a vote FOR ratification

# Edgar Filing: NANOGEN INC - Form DEF 14A of the appointment of Ernst & Young LLP.

#### 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 2005 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 6, 2005 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 2005 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 to, 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 proposal to be timely must be received no later than the 15th day following the day on which such notice of the date of the annual meeting is mailed or public disclosure of the meeting date is given.

#### 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, 2003, we believe that all of the Company s directors and executive officers filed the required reports on a timely basis with the SEC.

#### 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 is 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 30, 2004.

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. Respess, Esq.

Senior Vice President, General Counsel and Secretary.

## APPENDIX A

## AMENDED AND RESTATED

## 1997 STOCK INCENTIVE PLAN OF

## NANOGEN, INC.

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#### 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 to 4,508,760; (d) amended and restated on June 13, 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 to 6,758,760; (g) amended and restated on June 12, 2003 to increase the number of shares available for issuance under the Plan to 7,758,760; and (h) amended and restated on February 13, 2004 to increase the number of shares available for issuance under the Plan to 8,658,760 shares, subject to stockholder approval at the 2004 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 such Awards, (c) interpret the Plan and (d) make all other decisions relating to the operation of the Plan. The

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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 8,658,760. 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.
- 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 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

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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.

#### 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,

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and such an Award may provide that the SARs will not be exercisable unless the related 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.

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

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corporation), for accelerated vesting and accelerated expiration (provided the Company has previously had its initial public offering), or for settlement in cash.

#### 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

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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.

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 auditors 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 is 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 therefor) and that the Participant has substantial authority not to report any Excise Tax on the Participant is 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

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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 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 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 comp	osite transactions report fo	r 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.

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18.11 I	SO means an incentive stock option described in section 422(b) of the Code.
or advise	Key Employee means (a) a common-law employee of the Company, a Parent or a Subsidiary, (b) an Outside Director and (c) a consultar who provides services to the Company, a Parent or a Subsidiary as an independent contractor. Service as an Outside Director or as an lent contractor shall be considered employment for all purposes of the Plan, except as provided in Sections 4.2 and 4.3.
18.13 N	NSO means a stock option not described in sections 422 or 423 of the Code.
18.14 C	Option means an ISO or NSO granted under the Plan and entitling the holder to purchase one Common Share.
18.15 C	Optionee means an individual or estate who holds an Option or SAR.
18.16 C	Outside Director shall mean a member of the Board who is not a common-law employee of the Company, a Parent or a Subsidiary.
corporati other cor	Parent means any corporation (other than the Company) in an unbroken chain of corporations ending with the Company, if each of the cons 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 porations 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 symmetring as of such date.
18.18 P	Participant means an individual or estate who holds an Award.
18.19 P	Plan means this 1997 Stock Incentive Plan of Nanogen, Inc., as amended from time to time.
18.20 R	Restricted Share means a Common Share awarded under the Plan.
18.21 S	AR means a stock appreciation right granted under the Plan.
	AR Agreement means the agreement between the Company and an Optionee which contains the terms, conditions and restrictions g to his or her SAR.
	Stock Award Agreement means the agreement between the Company and the recipient of a Restricted Share or Stock Unit which contains conditions and restrictions partiaining to such Pastricted Share or Stock Unit

18.24 Stock Option Agreement means the agreement between the Comparestrictions pertaining to his or her Option.	any and an Optionee which contains the terms, conditions and
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 othe corporations other than the last corporation in the unbroken chain owns sall classes of stock in one of the other corporations in such chain. A corporat of the Plan shall be considered a Subsidiary commencing as of such date.	stock possessing 50% or more of the total combined voting power of
ARTICLE 19. EXECUTION	
To record the adoption of the Plan by the Board, the Company has caused its	s duly authorized officer to affix the corporate name and seal hereto.
	Nanogen, Inc.
	By: /s/ William L. Respess
	William L. Respess, Esq.
	Senior Vice President, General Counsel and Secretary
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of

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 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.

(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.

#### 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.

#### SECTION 8. LIMITATIONS ON STOCK OWNERSHIP.

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
- (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 600,000, 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.

#### 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.**

	Accumulation Period means a six (6) month period during which contributions may be made toward the purchase of Stock under the Plan, as ermined 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.
pay	Compensation means the total compensation paid in cash to a Participant by a Participating Company, including salaries, wages, overtime and commissions, but excluding bonuses, incentive compensation, moving or relocation allowances, car allowances, imputed income butable 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) V	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.

	General Counsel and Secretary	
	Its Senior Vice President,	
	By: /s/ William L. Repsess, ESQ.	
	Nanogen, Inc.	
To record the adoption of the Plan by the Board of Directors, the Company has cause seal hereto.	ed its duly authorized officer to affix the corporate name a	ınd
SECTION 15. EXECUTION.		
(o) Subsidiary means a corporation, fifty percent (50%) or more of the total comb the Company or by another Subsidiary.	oined voting power of all classes of stock of which is owner	ed b
(n) Stock means the Common Stock of the Company.		
(m) Purchase Price means the price at which Participants may purchase Stock und	der the Plan, as determined pursuant to Section 7(b).	
(l) Plan Account means the account established for each Participant pursuant to So	ection 6(a).	
(k) Plan means this Nanogen, Inc. Employee Stock Purchase Plan, as amended from	om time to time.	
(j) Participating Company means the Company and each present or future Subsidi	iary, except Subsidiaries excluded by the Committee.	
(i) Participant means an Eligible Employee who elects to participate in the Plan, a	as provided in Section 3(c).	
(h) Offering Period means a twenty-four (24) month period with respect to which determined pursuant to Section 3(a).	the right to purchase Stock may be granted under the Plan	n, as
Whenever possible, the determination of Fair Market Value by the Committee shall I The Wall Street Journal or as reported directly to the Company by Nasdaq or a compand binding on all persons.		

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#### **PROXY**

#### NANOGEN, INC.

#### PROXY SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

#### FOR ANNUAL MEETING ON JUNE 9, 2004

DAVID G. LUDVIGSON and HOWARD C. BIRNDORF, or each of them, each with the power of substitution, are hereby authorized to represent as proxies and vote all shares of stock of Nanogen, Inc. (the Company ) the undersigned is entitled to vote at the Annual Meeting of Stockholders of the Company to be held at the Hilton La Jolla Torrey Pines located at 10950 N. Torrey Pines Road, La Jolla, California on June 9, 2004 at 11:00 a.m. or at any postponement or adjournment thereof.

Shares represented by this proxy will be voted as directed by the stockholder. If no such directions are indicated, the proxies will have authority to vote FOR the election of the nominee for Class III Director and FOR Items 2, 3 and 4.

(CONTINUED AND TO BE SIGNED ON REVERSE SIDE)

SEE REVERSE SIDE

SEE REVERSE SIDE

X Please mark votes as in this example.

The Board of Directors recommends a vote FOR the election of the nominee for Class III Directors and FOR Items 2, 3 and 4.
1. Election of Director. <b>Nominee:</b> (01) Val Buonaiuto.
FOR THE NOMINEE // // WITHHELD FROM THE NOMINEE
// (FOR THE NOMINEE EXCEPT AS NOTED ABOVE.)
2. To approve an amendment of the 1997 Stock Option Plan to increase the number of shares authorized for issuance thereunder by 1,100,000 shares. // //
3. To approve an amendment of the Employee Stock Purchase Plan to increase the number of shares authorized for issuance thereunder by 150,000 shares. // //
4. To ratify the appointment of Ernst & Young LLP as the Company s independent auditors. // //
MARK HERE FOR ADDRESS CHANGE AND NOTE AT LEFT //
PLEASE MARK, SIGN, DATE AND MAIL THIS PROXY CARD PROMPTLY, USING THE ENCLOSED ENVELOPE.
Please sign exactly as your name(s) appear on this proxy. When singing as attorney, executor, administrator, trustee or guardian, please give full title as such. If shares are held jointly, each holder should sign.
Signature: Date: Date: Date: