

NANOGEN INC  
Form DEF 14A  
December 26, 2007  
Table of Contents

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

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

<input type="checkbox"/>	Preliminary Proxy Statement	<input type="checkbox"/>	<b>Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))</b>
<input checked="" type="checkbox"/>	Definitive Proxy Statement		
<input type="checkbox"/>	Definitive Additional Materials		
<input type="checkbox"/>	Soliciting Material Pursuant to §240.14a-12		

**NANOGEN, INC.**

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

No fee required.

Edgar Filing: NANOGEN INC - Form DEF 14A

Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

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

---

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

---

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

---

(4) Proposed maximum aggregate value of transaction:

---

(5) Total fee paid:

---

Fee paid previously with preliminary materials.

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

(1) Amount Previously Paid:

---

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

---

(3) Filing Party:

---

(4) Date Filed:

---

**Table of Contents**

**10398 Pacific Center Court**

**San Diego, California 92121**

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

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

December 26, 2007

Dear Stockholder:

You are cordially invited to attend a special meeting of stockholders of Nanogen, Inc. (the "Company"), which will be held on Friday, February 1, 2008 at 10:00 a.m. Pacific Time at the Company's principal executive offices located at 10398 Pacific Center Court, San Diego, California 92121, and any adjournments or postponements thereof for the following purposes:

1. To approve and ratify the Company's debt financing in August 2007 in which the Company issued and sold an aggregate of \$20,000,000 of senior convertible notes, convertible initially into an aggregate of up to 15,748,030 shares of the Company's common stock, and related warrants to purchase shares of our common stock, exercisable initially into an aggregate of 11,023,621 shares of our common stock, and may become exercisable for an additional 6,299,212 shares of our common stock;
2. To approve an amendment to the Company's Certificate of Incorporation to effect a reverse stock split of our common stock, \$0.001 par value per share, at a specific ratio within a range of 1:5 to 1:15, to be determined by our Board of Directors, in its sole discretion, within a twelve month period following stockholder approval;
3. To approve an amendment to the Company's Certificate of Incorporation to increase the number of authorized shares of common stock from one hundred thirty-five million (135,000,000) to two hundred and fifty million (250,000,000); and
4. To transact such other business as may properly come before the special meeting and any adjournment thereof.

These matters are described more fully in this Proxy Statement which we are sending to you along with this notice.

**After reading the Proxy Statement, please mark, date, sign and return, as soon as possible, the enclosed proxy card in the prepaid envelope, or vote via Internet or telephone in accordance with the instructions on the proxy card, to ensure that your shares will be represented. YOUR SHARES CANNOT BE VOTED UNLESS YOU SIGN, DATE AND RETURN THE ENCLOSED PROXY CARD, VOTE VIA INTERNET OR TELEPHONE, OR ATTEND THE SPECIAL MEETING IN PERSON.**

Sincerely Yours,

**HOWARD C. BIRNDORF**

*Chairman of the Board and*

*Chief Executive Officer*

December 26, 2007

**Table of Contents**

**10398 Pacific Center Court**

**San Diego, California 92121**

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

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

---

**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS**

**TO BE HELD ON FEBRUARY 1, 2008**

---

December 26, 2007

Dear Stockholder:

NOTICE IS HEREBY GIVEN that a special meeting of stockholders of Nanogen, Inc. (the Company) will be held on Friday, February 1, 2008 at 10:00 a.m. Pacific Time at the Company's principal executive offices located at 10398 Pacific Center Court, San Diego, California 92121, and any adjournments or postponements thereof for the following purposes:

1. To approve and ratify the Company's debt financing in August 2007 in which we issued and sold an aggregate of \$20,000,000 of senior convertible notes, convertible initially into an aggregate of up to 15,748,030 shares of the Company's common stock, and related warrants to purchase shares of our common stock, exercisable initially into an aggregate of 11,023,621 shares of our common stock, and may become exercisable for an additional 6,299,212 shares of our common stock;
2. To approve an amendment to the Company's Certificate of Incorporation to effect a reverse stock split of our common stock, \$0.001 par value per share, at a specific ratio within a range of 1:5 to 1:15, to be determined by our Board of Directors, in its sole discretion, within a twelve month period following stockholder approval;
3. To approve an amendment to the Company's Certificate of Incorporation to increase the number of authorized shares of common stock from one hundred thirty-five million (135,000,000) to two hundred and fifty million (250,000,000); and
4. To transact such other business as may properly come before the special meeting and any adjournment thereof.

These matters are described more fully in this Proxy Statement which we are sending to you along with this notice.

The Board of Directors has fixed the close of business on December 20, 2007, as the record date for determining the stockholders entitled to notice of and to vote at the special 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 SPECIAL MEETING, WE URGE YOU TO MARK, DATE, SIGN AND RETURN THE ENCLOSED PROXY CARD PROMPTLY.**

By order of the Board of Directors

**William L. Respass, Esq.**

December 26, 2007

**Table of Contents**

**NANOGEN, INC.**

---

**PROXY STATEMENT**

---

This Proxy Statement is furnished in connection with the solicitation by 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 special meeting of Stockholders to be held at the Company's principal executive offices located at 10398 Pacific Center Court, San Diego, California 92121 on Friday, February 1, 2008 at 10:00 a.m. Pacific Time, and at any adjournment or postponement of the special meeting (the Special Meeting ).

This Proxy Statement and the accompanying form of proxy are being mailed to stockholders on or about December 27, 2007.

**ABOUT THE MEETING**

**WHY AM I RECEIVING THESE MATERIALS?**

At the Special Meeting, stockholders will act upon matters described in the notice of meeting contained in this Proxy Statement. We sent you this Proxy Statement and the enclosed proxy card because the Board of Directors of the Company is soliciting your proxy to vote at the Special Meeting. You are invited to attend the Special Meeting to vote on specific proposals described in this Proxy Statement, the approval of which the Board of Directors believes will have certain beneficial effects on the Company. In particular, we believe that stockholder approval of these proposals will improve the Company's ability to raise money to fund its business operations. It is critical for the Company to raise more money in the immediate future to continue its business operations and fund its research and development activities. Therefore your vote is very important at the Special Meeting.

**WHO IS ENTITLED TO VOTE?**

Only holders of the Company's common stock outstanding as of the close of business on December 20, 2007 (the Record Date ) will be entitled to vote at the Special Meeting. At the close of business on the Record Date, the Company had 73,126,584 shares of common stock issued and outstanding and entitled to vote at the meeting. Each stockholder is entitled to one vote for each share of common stock he or she held on the Record Date.

**HOW MAY I VOTE?**

You may vote your shares at the Special Meeting. However, you do not need to attend the meeting to vote your shares. If your shares are registered in your own name you may vote over the Internet at <http://proxy.georgeson.com>, by telephone at 1-800-850-5909, or by signing and returning a proxy in the enclosed form. Votes submitted over the Internet or by telephone must be received before 5:00 p.m. Eastern Daylight Time on January 31, 2008. Instructions for voting over the Internet or by telephone are also set forth in the enclosed proxy card. If your shares are registered in the name of a bank or brokerage firm, you will receive instructions from them that must be followed in order for them to vote the shares in accordance with your instructions. In addition, if you are a participant in the Company's 401(k) Defined Contribution Savings and Retirement Plan, your vote submitted over the Internet, by telephone or by mail must be received before 5:00 p.m. Eastern Daylight Time on January 25, 2008.

## **Table of Contents**

### **WHO CAN ATTEND THE SPECIAL MEETING?**

All stockholders, or individuals holding their duly appointed proxies, may attend the Special Meeting. Appointing a proxy in response to this solicitation will not affect a stockholder's right to attend the Special Meeting and to vote in person. Please note that if you hold your shares in street name (in other words, through a broker, bank, or other nominee), you will need to bring a copy of a brokerage statement reflecting your stock ownership as of the Record Date to gain admittance to the Special Meeting.

### **WHAT CONSTITUTES A QUORUM AT THE SPECIAL MEETING?**

Holders of a majority of the outstanding shares of our common stock on the Record Date must be present or represented by proxy at the Special Meeting in order to have a quorum. Shares that are marked withheld or abstain are treated as being present for purposes of determining the presence of a quorum at the Special Meeting. Once a share is represented at the Special Meeting, it will be deemed present for quorum purposes throughout the Special Meeting (including any adjournment or postponement of that meeting unless a new record date is or must be set for such adjournment or postponement).

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.

### **CAN I CHANGE MY VOTE AFTER I RETURN MY PROXY CARD?**

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

### **WHAT AM I VOTING ON?**

You are voting on three proposals as described in more detail in this Proxy Statement. Proposal No. 1 is a proposal to approve and ratify the Company's debt financing in August 2007 in which we issued and sold an aggregate of \$20,000,000 of our senior convertible notes (the Notes), convertible initially into an aggregate of up to 15,748,030 shares of our common stock, and related warrants (the Warrants) to purchase shares of our common stock, exercisable initially into an aggregate of 11,023,621 shares of our common stock, and may become exercisable for an additional 6,299,212 shares of our common stock. Proposal No. 2 is a proposal to approve an amendment to our Certificate of Incorporation to effect a reverse stock split at a specific ratio, within a range of 1:5 to 1:15, to be determined by the Board of Directors in its sole discretion within a twelve month period following stockholder approval. Proposal No. 3 is a proposal to approve an amendment to our Certificate of Incorporation to increase the number of shares of authorized common stock from one hundred and thirty-five million (135,000,000) to two hundred and fifty million (250,000,000). Details of the proposals and the effect of stock approval of each of the proposals are set forth below in this Proxy Statement.

### **WHAT ARE THE BOARD'S RECOMMENDATIONS?**

The Board recommends a vote:

**FOR** the approval and ratification of the debt financing completed in August 2007 (Proposal No. 1);



## **Table of Contents**

**FOR** the approval of an amendment to our Certificate of Incorporation to effect a reverse stock split of our common stock at a specific ratio, within a range of 1:5 to 1:15, to be determined by the board of directors, in its sole discretion, within a twelve month period following stockholder approval (Proposal No. 2); and

**FOR** the approval of an amendment to our Certificate of Incorporation to increase the number of authorized shares of common stock from one hundred and thirty-five million (135,000,000) to two hundred and fifty million (250,000,000) (Proposal No. 3).

### **WHAT VOTE IS REQUIRED TO APPROVE THE PROPOSALS?**

The vote required to approve Proposal No. 1 (approval of August 2007 debt financing) is a majority of the total votes cast on such proposal, provided a quorum is present. The vote required to approve Proposal No. 2 (authorizing a reverse stock split) and Proposal No. 3 (authorizing an increase in authorized number of shares of common stock) is a majority of the outstanding stock entitled to vote at the Special Meeting.

An abstaining vote and a broker non-vote are counted as present, and are therefore included for the purposes of determining whether a quorum of shares is present at the Special Meeting. A broker non-vote occurs when a broker or nominee holding shares in street name for a stockholder does not vote on a particular proposal because such broker or nominee does not have the discretionary voting authority with respect to that proposal and has not received instructions from the stockholder. Under the rules that govern brokers who are voting with respect to shares held by them as nominee, brokers have the discretion to vote such shares only on routine matters. Routine matters include, among other things, the election of directors and ratification of auditors. However, the proposals included in this Proxy Statement are non-routine matters, therefore the brokers do not have discretionary voting authority to vote such shares.

Broker non-votes are not considered votes cast and therefore have no impact on matters requiring a majority of the votes cast, such as Proposal No. 1. However, broker non-votes will have the effect of a negative vote for matters that require a majority of the outstanding stock entitled to vote, such as Proposal No. 2 and Proposal No. 3.

### **ARE THERE ANY OTHER ITEMS THAT ARE TO BE DISCUSSED AT THE SPECIAL MEETING?**

No. The Company is not aware of any other matters that you will be asked to vote on at the Special Meeting. If other matters are properly brought before the Special Meeting, the Board of Directors or proxy holders will use their discretion on these matters as they may arise.

### **WHO PAYS TO PREPARE, MAIL, AND SOLICIT THE PROXIES?**

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 our common stock. The Company has retained Georgeson Inc. to assist in the solicitation of proxies for a fee of approximately \$10,000, plus certain out of pocket expenses.

### **HOW CAN I CONTACT THE MEMBERS OF 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 Nanogen's Board of Directors, c/o Corporate Secretary, Nanogen, Inc. 10398 Pacific Center Court, San Diego, California 92121.

**Table of Contents**

**WHO CAN HELP TO ANSWER MY ADDITIONAL QUESTIONS?**

If you would like additional copies, without charge, of this Proxy Statement or if you have additional questions about the proposals, including with respect to the procedures for voting your shares, you should contact

Nanogen, Inc.

10398 Pacific Center Court

San Diego, California 92121

Telephone: (858) 410-4600

or

Georgeson

199 Water Street, 26th Floor

New York, NY 10038

Telephone: (800) 501-4283

**IMPORTANT**

**WHETHER OR NOT YOU INTEND TO BE PRESENT AT THE SPECIAL 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 SPECIAL MEETING.**

---

**Table of Contents**

**PROPOSAL NO. 1**

**APPROVAL OF THE AUGUST 2007 DEBT FINANCING, THE ISSUANCE AND SALE OF AN AGGREGATE OF \$20,000,000 OF SENIOR CONVERTIBLE NOTES AND RELATED WARRANTS TO PURCHASE SHARES OF COMMON STOCK, AND THE ISSUANCE OF SHARES OF COMMON STOCK UPON CONVERSION OF THE NOTES AND EXERCISE OF THE WARRANTS**

***Introduction***

We are seeking stockholder approval of a registered debt financing we completed in August 2007 in which we issued and sold an aggregate of \$20.0 million in principal amount of our senior convertible notes, or the Notes, convertible initially into an aggregate of up to 15,748,030 shares of our common stock (the Common Stock), and Series A warrants, Series B warrants and Series C warrants, or the Warrants, to purchase shares of common stock, exercisable initially into an aggregate of 11,023,621 shares of our common stock, and may become exercisable for an additional 6,299,212 shares of our common stock (the Debt Financing). The Notes and Warrants were sold pursuant to an effective shelf registration statement and the terms of a Securities Purchase Agreement, dated August 26, 2007, between us and certain institutional investors (the Securities Purchase Agreement). The terms of the Notes are set forth in an indenture dated as of August 27, 2007 with The Bank of New York Trust Company, N.A., as trustee, which was supplemented by the first supplemental indenture dated as of August 27, 2007 (the Indenture).

As discussed below, pursuant to the terms of the Securities Purchase Agreement, we agreed to seek stockholder approval of the Debt Financing. If this approval is obtained, it will eliminate the \$1.2675 floor on adjustments to the conversion price of the Notes and the \$1.13 floor on adjustment to the exercise price of the Warrants, in the event of future issuances of shares of our common stock (or securities convertible into or exercisable for common stock) at a price per share that is less than the then current conversion price of the Notes or the then current exercise price of the Warrants.

We believe that stockholder approval of Proposal No. 1 will also provide us with more flexibility to raise capital by removing certain restrictions on our ability to conduct equity financing in the future. We will need to raise more money in the immediate future to continue our business operations and fund our research and development activities, therefore stock approval of Proposal No. 1 is critical in ensuring that we will have the ability to do so.

The following discussion includes summaries of the Securities Purchase Agreement, the Indenture and the Warrants, copies of which are attached to this proxy statement as Appendices A, B, and C, respectively. These summaries are qualified in their entirety by reference to those documents.

***Basic Terms of the Notes***

The initial maturity date of the Notes is August 27, 2010, subject to extension under certain circumstances. The Notes bear interest at 6.25% per annum, payable quarterly in arrears commencing on September 30, 2007. The interest will be paid, subject to certain conditions, in cash or shares of common stock, or a combination of cash and shares of common stock. Upon and during the occurrence of an Event of Default (as defined in the Indenture), the interest rate under the Notes will increase to 12% per annum. Past due amounts, including principal and interest, are subject to a late charge of 15% per annum from the date due until paid.

The principal amount of the Notes, together with any accrued and unpaid interest and any late charges (the Conversion Amount), are convertible by the holders of the Notes at any time into shares of common stock at an initial conversion price of \$1.27 per share, subject to certain limitations on beneficial ownership and the rules and regulations of the NASDAQ Global Market. The Conversion Amount will also include the net present value of interest on the Note calculated at a 6.25% discount rate upon any conversion event or redemption event, subject to certain limitations.

---

**Table of Contents**

The conversion price is subject to anti-dilution adjustments, including full ratchet anti-dilution protection for any equity or convertible securities issuances within eighteen (18) months of the issuance of the Notes and weighted-average anti-dilution protection thereafter. If through the eighteen (18) month anniversary of the issuance date of the Notes, we issue or sell any shares of our common stock (except for certain issuances of securities such as stocks and options under employee benefit plans) for a consideration per share (the New Issuance Price ) less than a price (the Applicable Price ) equal to the Conversion Price in effect immediately prior to such issue or sale (the foregoing a Dilutive Issuance ), then immediately after such issuance or sale, the Conversion Price then in effect shall be reduced to an amount equal to the New Issuance Price. If on or after the eighteen (18) month anniversary of the issuance date of the Notes, we issue or sell any shares of common stock (except for certain issuances of securities such as stocks and options under employee benefit plans) in a Dilutive Issuance, then immediately after such Dilutive Issuance, the Conversion Price then in effect will be reduced to an amount equal the product of (A) the Conversion Price in effect immediately prior to such Dilutive Issuance and (B) the quotient determined by dividing (1) the sum of (I) the product derived by multiplying the Conversion Price in effect immediately prior to such Dilutive Issuance and the number of shares of common stock deemed outstanding immediately prior to such Dilutive Issuance plus (II) the consideration, if any, received by us upon such Dilutive Issuance, by (2) the product derived by multiplying (I) the Applicable Price in effect immediately prior to such Dilutive Issuance by (II) the number of shares of common stock deemed outstanding immediately after such Dilutive Issuance.

The anti-dilution adjustment described above is subject to a floor, such that no adjustment will be made if it causes the conversion price to be less than \$1.2675 ( Conversion Price Floor ) as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction, unless we receive stockholder approval that may be required under applicable rules of NASDAQ. Pursuant to the Securities Purchase Agreement, we have agreed to solicit stockholder approval for the issuance of the Notes and the Warrants at or prior to our annual stockholders meeting in 2008.

If at any time after the twenty-four-month anniversary of the issuance date of the Notes, the last closing sale price of our common stock on the NASDAQ Global Market exceeds \$2.2225 for 20 out of 30 consecutive trading days, then we have the right, subject to compliance with certain conditions, to require holders of the Notes to convert all or any portion of the Notes.

The Indenture contains event of default provisions, which include, but are not limited to, suspension of Common Stock from trading, failure to cure conversion failures or maintain sufficient shares of common stock available for conversion, breaches of covenants, breaches of material representations, failure to repay certain indebtedness exceeding \$250,000, the occurrence of bankruptcy or similar events, default under our material agreements, and the rendering of a final judgment in excess of \$500,000 not covered by insurance. After the occurrence of an Event of Default, any holder may require the Company to redeem all or a portion of the holder's Note at a redemption price in cash equal to the greater of (i) the product of (x) the Conversion Amount to be redeemed and (y) the applicable redemption premium (120%), and (ii) the product of (A) the Conversion Amount divided by the conversion price in effect at such time as the holder delivers the redemption notice and (B) the greater of (1) Closing Sale Price of the Common Stock on the date immediately preceding the Event of Default, and (2) the Closing Sale Price of the Common Stock on the date immediately after the Event of Default and (3) the Closing Sale Price of the Common Stock on the date the holder delivers the redemption notice.

In connection with a Change of Control (as defined in the Indenture), the holders of the Notes will have the right to require the Company to redeem all or any portion of their Notes at a redemption price (the Change of Control Redemption Price ) in cash equal to the sum of (1) accrued and unpaid interest and late charges and (2) the greater of (i) the product of (x) the Conversion Amount (excluding interest and late charges) being redeemed and (y) the quotient determined by dividing (A) the greater of the Closing Sale Price of the Common Stock immediately prior to the consummation of the Change of Control, the Closing Sale Price of the Common Stock immediately following the public announcement of such proposed Change of Control and the Closing Sale Price of the Common Stock immediately prior to the public announcement of such proposed Change of Control

## **Table of Contents**

by (B) the then applicable conversion price, and (ii) 120% of the Conversion Amount (excluding interest and late charges) being redeemed.

In the event of a Change of Control, the Company has the right to redeem all of the Notes at a price in cash equal to the sum of (1) accrued and unpaid interest on the Notes and late charges and (2) the greater of (i) the product of (x) the Conversion Amount (excluding interest and late charges) of the Notes being redeemed and (y) the quotient determined by dividing (A) the greater of the Closing Sale Price of the Common Stock immediately prior to the consummation of the Change of Control, the Closing Sale Price of the Common Stock immediately following the public announcement of such proposed Change of Control and the Closing Sale Price of the Common Stock immediately prior to the public announcement of such proposed change of control by (B) the then applicable conversion price, and (ii) 120% (if the acquirer is not a publicly traded company) or 140% (if the acquirer is a publicly traded company) of the Conversion Amount (excluding interest and late charges) of the Notes being redeemed.

Upon the occurrence of any Fundamental Transaction (as defined in the Indenture), the Company will be required to reaffirm to the holders its obligations under the Notes and financing agreements as well as to provide a confirmation that following the consummation of the Fundamental Transaction, the Note will be convertible into either (i) Common Stock or other shares of publicly traded Common Stock (or their equivalent) of the Company, or the Company as the Successor Entity (as defined in the Indenture), or (ii) if the Company is not a publicly traded entity following the Fundamental Transaction, the securities or other cash or assets that the Note holder would have received had it converted the Note immediately prior to the consummation of the Fundamental Transaction.

The Indenture contains customary covenants which, among other things, restrict the Company's ability to (i) incur additional indebtedness other than in connection with existing indebtedness or certain other permitted indebtedness under the terms of the Indenture; (ii) grant liens on the Company's assets other than certain ordinary permitted liens; and (iii) make distributions on or repurchase shares of Common Stock.

In addition, we will not be obligated to issue any shares of common stock upon conversion of the Notes, and the holders of the Notes shall not have the right to receive upon conversion of the Notes any shares of common stock, if the issuance of such shares of common stock would exceed the aggregate number of shares of common stock permitted under the NASDAQ, unless we obtain the approval of our stockholders as required by the applicable rules of NASDAQ.

### ***Basic Terms of the Warrants***

The Warrants entitle the holders to purchase initially an aggregate of 11,023,622 shares of the Common Stock. Series A Warrants are exercisable at any time during a five (5)-year period following the date of issuance at an initial exercise price of \$1.14. At any time following the termination of the letter of credit, if the closing sales price of the Common Stock is at least 135% of the applicable exercise price of Series A Warrants for 20 out of 30 consecutive trading days, the Company may require holders of the Series A Warrants to exercise the Series A Warrants.

Series B Warrants become exercisable only if any Series A Warrant is exercised, whether at the option of the holders or following the Company Exercise Right. The number of exercisable Series B Warrants will equal to the number of Series A Warrants exercised. With respect to Series B Warrants that become exercisable in any calendar quarter, the exercise price will equal to 110% of the Closing Sales Price of the Common Stock on last trading day of such calendar quarter. On the date when all of Series A Warrants are exercised, the exercise price for any previously unexercised Series B Warrants will be equal to 110% of the Closing Sales Price of the Common Stock on such date, provided that such exercise price is subject to a floor and cannot be less than \$1.13 per share, unless we receive stockholder approval that may be required under applicable rules of NASDAQ. Each Series B Warrant has a three (3)-year term from the date on which the Series B Warrant becomes exercisable.

---

## **Table of Contents**

Series C Warrants are exercisable at any time during a five (5)-year period following the date of issuance at an initial exercise price of \$1.14. At any time after the later of (i) six-month anniversary of the issuance date of Series C Warrants; (ii) thirty (30) days after the date when all Series A Warrants are exercised; and (iii) thirty (30) days after the termination of the letter of credit, if the closing sales price of the Common Stock is at least 125% of the applicable exercise price for 20 out of 30 consecutive trading days, the Company may require holders of the Series C Warrants to exercise the Series C Warrants.

The exercise price of the Warrants is subject to anti-dilution adjustments that are identical to those described above for the Notes, including full ratchet anti-dilution protection for any equity or convertible securities issuances within eighteen (18) months of the issuance of the Warrants and weighted-average anti-dilution protection thereafter. The anti-dilution adjustment is subject to a floor, such that no adjustment will be made if it causes the exercise price to be less than \$1.13 ( Exercise Price Floor ) as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction, unless we receive stockholder approval that may be required under applicable rules of NASDAQ. Pursuant to the Securities Purchase Agreement, we have agreed to solicit stockholder approval for the issuance of the Notes and the Warrants at or prior to our annual stockholders meeting in 2008.

In the event of a Fundamental Transaction (as defined in the Warrants), the Purchaser has certain right to require the Company to exchange the Warrants or to reaffirm its obligations after the Fundamental Transaction. The Warrants may only be exercised on a cashless exercise basis in the event that the Shelf Registration Statement or another registration statement is not available at the time of exercise of such Warrants.

In addition, we will not be obligated to issue any shares of common stock upon exercise of the Warrants, and the holders of the Warrants shall not have the right to receive upon exercise of Warrants any shares of common stock, if the issuance of such shares of common stock would exceed the aggregate number of shares of common stock permitted under the rules or regulations of the NASDAQ, unless we obtain the approval of our stockholders as required by the applicable rules of the NASDAQ.

### ***Restricted Cash and Letter of Credit***

Pursuant to the Securities Purchase Agreement, we issued a letter of credit in favor of holders of the Notes in the amount of \$7.0 million to secure our obligations under the Notes. We deposited \$7.3 million of the total \$20.0 million proceeds from the Debt Financing in a cash collateral account with Wells Fargo Bank to secure our reimbursement obligations in respect of the letter of credit. The funds in the cash collateral account will be released to us if we meet certain conditions, which include, but are not limited to, the following: (i) the closing sales price of our common stock on the NASDAQ Global Market is equal to or exceeds \$1.524 per share for 20 out of 30 consecutive trading days; (ii) there is no event of default under the Indenture; and (iii) our common stock has not been suspended for trading on NASDAQ. The Notes are not secured by any of our assets or assets of our subsidiaries.

### ***Use of Proceeds***

The net proceeds we received from the Debt Financing was approximately \$19.04 million, after deducting the placement agent fees and estimated offering expenses. At closing we deposited \$7.3 million in cash from the proceeds of the Debt Financing in a cash collateral account with Wells Fargo Bank to secure our reimbursement obligations in respect of the letter of credit. See the section above entitled *Letter of Credit* under the heading *Basic Terms of Notes*. We may receive additional funds in the event of any cash exercise of the Warrants.

We intend to use the net proceeds we received from the Debt Financing for working capital, acquisitions and other general corporate purposes, including the development and support of our sales and marketing organization, support for our continuing research and development efforts and, if opportunities arise, to acquire businesses, products, technologies or licenses that are complementary to our business and make strategic

---

## **Table of Contents**

investments in businesses complementary to our business. As of the date of this proxy statement, we have no specific agreements, understandings, commitments or arrangements with regard to any particular future acquisition or strategic investment, and no assurance can be given that we will be able to consummate any such acquisitions or strategic investments or that, if consummated, such acquisitions or investments would be on terms that are favorable to us.

### ***Why We Are Seeking Stockholder Approval of Proposal No. 1***

We are seeking stockholder approval of the Debt Financing and the issuance of common stock upon conversion of the Note and exercise of the Warrants in order to (i) eliminate the Conversion Price Floor and Exercise Price Floor contained in the Note and the Warrants, respectively; (ii) improve our ability to raise capital by removing certain restriction on equity financing; (ii) comply with the NASDAQ Marketplace Rules, and (iii) fulfill a covenant made by us under the Securities Purchase Agreement.

*Elimination of Pricing Floors.* In the event we issue shares of our common stock or securities convertible into share of our common stock at prices below the conversion price of the Notes or the exercise price of the Warrants, or dilutive issuances, the anti-dilution provisions in the Notes and Warrants prohibit us to adjust the conversion price or the exercise price to below the Conversion Price Floor or the Exercise Price Floor, respectively. If these pricing floors are eliminated, then following future dilutive issuances, it is possible for such conversion or exercise price to be adjusted to a price that is below the market price of the common stock as of the closing of the Debt Financing. As such, the holders of the Notes will receive full benefit of the anti-dilution protection. In addition, it will also be possible for the number of shares of common stock to be issued upon conversion of the Notes and/or exercise of the Warrants to equal or exceed 20% of the outstanding shares or voting power as of the closing of the Debt Financing.

*Improved Ability to Raise Capital.* We will need to raise more money in the immediately future to continue our business operations and fund our research and development activities, and to further develop our current products, bring our products to market and enhance our manufacturing and marketing capabilities. We depend heavily on equity financing to fund our operations, especially when we are not able to access the funds in the cash collateral account with Wells Fargo due to the performance of our stock. However, the Securities Purchase Agreement prohibits us from issuing or selling shares of our common stock, warrants or other equity securities at a price per share that is less than the conversion price of the Note or the exercise price of the Warrants without first obtaining stockholder approval to eliminate the Conversion Price Floor and the Exercise Price Floor. If stockholder approval is obtained, it will remove this restriction and provide us with more flexibility to raise capital through equity financing in the future. Therefore, stockholder approval of Proposal No. 1 is critical in ensuring that we will have the ability to raise the necessary capital to continue our operations.

*NASDAQ Marketplace Rules.* Rule 4350(i) of the NASDAQ Marketplace Rules requires stockholder approval for the issuance of securities other than in a public offering at a price per share less than the greater of the book or market value of a company's stock, where the amount of securities being issued represents 20% or more of an issuer's outstanding listed securities or 20% or more of the voting power outstanding before the issuance.

We are subject to the NASDAQ Marketplace Rules because our common stock is listed on the NASDAQ Global Market. The issuance of the Notes and Warrants in the Debt Financing, and the issuance of shares of common stock upon conversion of the Notes and exercise of the Warrants, did not require stockholder approval under NASDAQ Marketplace Rule 4350(i) because of the applicable Conversion Price Floor and Exercise Price Floor. We are seeking stockholder approval pursuant to Rule 4350(i) so that under the terms of the Notes and the Warrants, if stockholder approval is obtained, the Conversion Price Floor and Exercise Price Floor contained in the Convertible Note and the Warrants will be eliminated. In addition, it will also be possible for the number of shares of common stock to be issued upon conversion of the Convertible Note or exercise of the Warrants to equal or exceed 20% of the outstanding shares or voting power as of the closing of the Debt Financing.

## **Table of Contents**

*Covenant of the Debt Financing.* The Securities Purchase Agreement includes a covenant that requires us to seek stockholder approval of the Debt Financing in accordance NASDAQ Marketplace Rules prior to our annual stockholders meeting in 2008. We will satisfy this obligation by seeking and obtaining such stockholders approval at the Special Meeting.

### ***No Appraisal Rights***

Under Delaware law, stockholders are not entitled to appraisal or other similar rights in connection with Debt Financing.

### ***Effect of the Approval of this Proposal No. 1 on Current Stockholders***

If the stockholders approve Proposal No. 1, then the conversion price of the Notes and exercise price of the Warrants would be adjusted downward if we issue or sell our securities at a price less than the current conversion price of the Notes or exercise price of the Warrants. As a result, the issuance of Common Stock upon a future conversion of Notes or exercise of the Warrants could potentially result in additional and significant dilution to the voting interest of our existing stockholders.

If we obtained stockholder approval of Proposal No. 1, the total number of shares of common stock that may be issued upon conversion of the Notes and exercise of the Warrants, and as interest payment under the Notes, may exceed 20% of outstanding shares or voting power as of the closing of the Debt Financing. The 33,070,863 shares of Common Stock initially issuable upon conversion of the Note and exercise of the Warrants (without regard to additional shares which may become issuable due to anti-dilution adjustments, interest payment and other adjustments under the terms of the Notes and Warrants) represent approximately 45.2% of the shares of Common Stock outstanding as of the Record Date prior to the issuance of such shares of Common Stock and, assuming such shares of common stock are issued, represent a significant dilution of the voting interests of existing stockholders. The issuance of shares of common stock pursuant to the Notes and the Warrants will also have a dilutive effect on earnings per share and may adversely affect the market price of our common stock.

In addition, if the stockholders approve Proposal No. 1, we will no longer be subject to the restrictions under the Securities Purchase Agreement to sell shares of our common stock at a discounted price, which will improve our ability to raise capital and fund our operations through equity financing. It is critical that we raise more money in the immediate future to continue our operations, therefore it is important that we obtain stockholder approval of Proposal No. 1.

Finally, if the stockholders approve Proposal No. 1, we will have satisfied our obligations under the Securities Purchase Agreement to seek stockholders approval of the Debt Financing and comply with NASDAQ Marketplace Rules as described above.

### ***Approval Required***

The vote of a majority of the total votes cast on Proposal No. 1 is required to approve the Debt Financing. Abstentions and broker non-votes will not have an impact on the approval of Proposal No. 1.

### ***Further Information***

The terms of the Notes, Warrants and other transaction documents in the Debt Financing are complex and only briefly summarized above. For further information on the Debt Financing and the rights of the holders of the Notes, please refer to the descriptions contained in a prospectus supplement and the accompanying prospectus filed with the SEC on August 27, 2007 and the Current Report on Form 8-K filed on August 27, 2007 and the transaction documents filed as exhibits to such report.

### ***Recommendation***

**OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR APPROVAL OF PROPOSAL NO. 1.**



**Table of Contents**

**PROPOSAL NO. 2**

**APPROVAL OF AMENDMENT TO THE COMPANY S CERTIFICATE OF INCORPORATION**

**TO EFFECT A REVERSE STOCK SPLIT**

***Introduction***

The Board is recommending that the stockholders approve an amendment to our Certificate of Incorporation to effect a reverse stock split of outstanding shares of our common stock at a ratio within a range of 1:5 to 1:15. If this proposal is approved, the Board or a committee of the Board will have the authority to decide, within twelve months from the Special Meeting, whether to implement the split and the exact ratio of the split within this range if it is to be implemented. If the Board then decides to implement the split, it will become effective after filing the amendment with the Secretary of State of the State of Delaware (the Effective Date ). Even if the stockholders approve the reverse split, it is within the discretion of the Board or a committee of the Board when to effect the reverse stock split, if at all, within twelve months from the Special Meeting, and to select the appropriate exchange ratio.

If the reverse stock split is implemented, the number of issued and outstanding shares of common stock would be reduced in accordance with the exchange ratio selected by the Board or committee. Following the reverse stock split, all of our securities convertible into or exercisable for shares of common stock, including the Notes and Warrants, will be convertible or exercisable at a higher price for such lesser number of shares of common stock for or into which such security was previously convertible or exercisable as determined by the exchange ratio and such documents governing such security. The reverse stock split, if implemented, would not change the number of authorized shares of common stock or the par value of our common stock, which is why we are making a separate proposal to increase the number of authorized shares of our common stock. See PROPOSAL NO. 3. The form of amendment to the Company s Certificate of Incorporation to effect the reverse split is attached as Appendix D to this proxy statement.

***Purpose of the Reverse Stock Split***

The Board s primary objectives in proposing the reverse stock split are to raise the per share trading price of our common stock and to increase the number of shares of our authorized but unissued common stock. The Board believes that a higher per share trading price would, among other things, (i) better enable us to maintain the listing of our common stock on The NASDAQ Global Market, (ii) facilitate higher levels of institutional stock ownership, where investment policies generally prohibit investments in lower-priced securities and (iii) better enable us to raise funds to finance our business operations.

Our common stock is currently quoted on The NASDAQ Global Market. In order for the common stock to continue to be quoted on The NASDAQ Global Market, we must satisfy various listing standards established by NASDAQ, including the requirement that we maintain a minimum bid price of our common stock above \$1.00 per share. If the closing bid price of our common stock is under \$1.00 per share for 30 consecutive trading days and does not thereafter reach \$1.00 per share or higher for a minimum of ten (10) consecutive trading days during 180 calendar days following notification by NASDAQ, NASDAQ may delist the common stock from trading. We believe that maintaining the listing of our common stock on the NASDAQ Global Market is in the best interests of the Company and our stockholders.

On November 27, 2007, we received a letter from NASDAQ Stock Market informing us that the closing bid price of our common stock was under \$1.00 per share for 30 consecutive business days, and that we have 180 calendar days, or until May 27, 2008, to regain compliance with the minimum bid requirement under NASDAQ rules. The closing sale price of our common stock on December 6, 2007 was \$0.565 per share. The reverse stock split could increase the per share bid price of our common stock, thereby help us regain compliance with the minimum bid price requirement under the listing standard of NASDAQ Global Market and avoid delisting of our common stock.

## **Table of Contents**

The Board further believes that an increased stock price may encourage investor interest and improve the marketability of our common stock to a broader range of investors, and thus enhance liquidity. Because of the trading volatility often associated with low-priced stocks, many brokerage firms and institutional investors have internal policies and practices that either prohibit them from investing in low-priced stocks or tend to discourage individual brokers from recommending low-priced stocks to their customers. The Board believes that the anticipated higher market price resulting from a reverse stock split would enable institutional investors and brokerage firms with such policies and practices to invest in our common stock.

Furthermore, the Board believes that the reverse split would facilitate our efforts to raise capital to fund our planned operations. It is critical for the Company to raise more money in the immediate future to continue its business operations and fund its research and development activities. We depend heavily on the issuance of equity securities as a source of funding. The reverse stock split would reduce the number of shares of common stock outstanding without reducing the total number of authorized shares of Common Stock (we are also seeking stockholder approval to increase the authorized number of shares in Proposal No. 3). As a result, the Company would have a larger number of authorized but unissued shares from which to issue additional shares of common stock, or securities convertible or exercisable into shares of common stock, in equity financing transactions.

The purpose of seeking stockholder approval of a range of exchange ratios from 1:5 to 1:15 (rather than a fixed exchange ratio) is to provide us with the flexibility to achieve the desired results of the reverse stock split. If our stockholders approve this proposal, the Board or a committee of the Board would effect a reverse stock split only upon the Board or committee's determination that a reverse stock split would be in the best interests of the Company at that time. If the Board were to effect a reverse stock split, the Board would set the timing for such a split and select the specific ratio within the range of 1:5 to 1:15. No further action on the part of stockholders would be required to either implement or abandon the reverse stock split. If the stockholders approve the proposal, and the Board or a committee of the Board determines to effect the reverse stock split, we would communicate to the public, prior to the Effective Date, additional details regarding the reverse split, including the specific ratio selected by the Board or committee. If the Board or a committee of the Board does not implement the reverse stock split within twelve months from the Special Meeting, the authority granted in this proposal to implement the reverse stock split will terminate. The Board reserves its right to elect not to proceed with the reverse stock split if it determines, in its sole discretion, that this proposal is no longer in the best interests of the Company.

### ***Criteria to be Used for Decision to Effectuate the Reverse Stock Split***

If the stockholders approve the reverse stock split, the Board or a committee of the Board will be authorized to proceed with the reverse split. In determining whether to proceed with the reverse split and setting the exact amount of split, if any, the Board or committee will consider a number of factors, including market conditions, existing and expected trading prices of our common stock, The NASDAQ Global Market listing requirements, the Company's additional funding requirements and the amount of the Company's authorized but unissued common stock. In determining a specific reverse stock split ratio, the Board will consider, in addition to any other factors that it deems relevant, which ratio it believes enhances the likelihood that we will remain eligible for listing on The NASDAQ Global Market and attractive to potential investors without excessively reducing the liquidity in the common stock due to the fewer number of shares outstanding.

### ***Material Effects of Proposed Reverse Stock Split***

The Board believes that the reverse stock split will increase the per share price of our common stock in order to, among other things, ensure continued compliance with the NASDAQ minimum bid price listing requirement and generate interest in the Company among investors. The Board cannot predict, however, the effect of the reverse split upon the market price for the common stock. The market price per share of our common stock after the reverse split may not rise in proportion to the reduction in the number of shares of common stock outstanding resulting from the reverse split, which would reduce the market capitalization of the

---

**Table of Contents**

Company. The market price per share after the reverse stock split may not remain in excess of the \$1.00 minimum bid price as required by NASDAQ, or the Company may not otherwise meet the requirements for continued listing on The NASDAQ Global Market. The market price of the common stock may also be based on our performance and other factors, the effect of which the Board cannot predict.

The reverse split will affect all stockholders of the Company uniformly and will not affect any stockholder's percentage ownership interests or proportionate voting power, except to the extent that the reverse split results in any of stockholders owning a fractional share. In lieu of issuing fractional shares, we may either (i) directly pay each stockholder who would otherwise have been entitled to a fraction of a share an amount in cash equal to the closing sale price of the common stock, as quoted on NASDAQ on the Effective Date, multiplied by the fractional share amount, or (ii) make arrangements with our transfer agent to aggregate all fractional shares otherwise issuable in the reverse stock split and sell these whole shares as soon as possible after the Effective Date at then prevailing market prices on the open market on behalf of those stockholders, and then pay each such stockholder his, her or its pro rata portion of the sale proceeds.

The principal effects of the reverse split will be that (i) the number of shares of common stock issued and outstanding will be reduced from shares as of December 3, 2007 to a range of 14,625,316 to 4,875,106 shares, depending on the exact split ratio chosen by the Board or a committee of the Board, (ii) all outstanding options and warrants, including the Warrants issued in the Debt Financing, entitling the holders to purchase shares of common stock will enable such holders to purchase, upon exercise of their options or warrants, one-fifth to one-fifteenth of the number of shares of common stock which such holders would have been able to purchase upon the exercise of their options or warrants immediately preceding the reverse split, at an exercise price equal to five to fifteenth times the exercise price specified before the reverse split, resulting in the same aggregate price being required to be paid upon exercise thereof immediately preceding the reverse split; (iii) all outstanding restricted stock units, entitling the holders to be issued shares of common stock following the vesting of those units will entitle the holders to be issued one-fifth to one-fifteenth of the number of shares of common stock such holders would have been issued pursuant to those units immediately preceding the reverse split; (iv) all outstanding Notes entitling the holders to convert into shares of common stock will enable such holders to convert one-fifth to one-fifteenth of the number of shares of common stock which such holders would have been able to convert immediately preceding the reverse split, at a conversion price equal to five to fifteen times the conversion price specified before the reverse split, resulting in the same aggregate price being required to be paid upon conversion thereof immediately preceding the reverse split; and (v) the following adjustments will be made to the Company's 1997 Stock Incentive Plan, 2002 Stock Bonus Plan, Employee Stock Purchase Plan and the Epoch Biosciences, Inc. 2003 Stock Incentive Plan (the "Plans"): (a) the number of shares reserved for issuance pursuant to each of the Plans will be reduced to one-fifth to one-fifteenth of the number of shares currently reserved for issuance under each such plan; (b) the maximum number of option shares and stock appreciation rights that may be granted to any one participant in a single calendar year under the 1997 Stock Incentive Plan will be reduced to one-fifth to one-fifteenth of the number of shares that may currently be granted to any participant; (c) the maximum number of shares purchasable per participant at each semi-annual purchase interval under the Employee Stock Purchase Plan will be reduced to one-fifth to one-fifteenth of the number of shares currently purchasable per participant at each such semi-annual purchase interval; and (d) the annual automatic increase to the share reserve under the Epoch Biosciences, Inc. 2003 Stock Incentive Plan will be limited each year to one-fifth to one-fifteenth of the number of shares that would otherwise have been added to the plan pursuant to such automatic increase.

The reverse stock split will not affect the par value of our common stock. As a result, on the Effective Date, the stated capital on the Company's balance sheet attributable to the common stock will be reduced to one-fifth to one-fifteenth of its present amount, depending on the exact amount of the split, and the additional paid-in capital account will be credited with the amount by which the stated capital is reduced. The per share net income or loss and net book value of the common stock will be retroactively increased for each period because there will be fewer shares of common stock outstanding. The reverse stock split, if implemented, would not change the number of authorized shares of common stock.

## **Table of Contents**

The reverse stock split and amendment of our Certificate of Incorporation will not change the terms of the common stock. After the reverse split, the shares of common stock will have the same voting rights and rights to dividends and distributions, if any, and will be identical in all other respects to the Common Stock now authorized. Each stockholder's percentage ownership of the new common stock will not be altered except for the effect of eliminating fractional shares. The common stock issued pursuant to the reverse split will remain fully paid and non-assessable. The reverse split is not intended as, and will not have the effect of, a going private transaction covered by Rule 13e-3 under the Securities Exchange Act of 1934, as amended. Following the reverse split, we will continue to be subject to the periodic reporting requirements of the Securities Exchange Act of 1934, as amended.

### ***Procedure for Effecting Reverse Stock Split and Exchange of Stock Certificates***

If the reverse stock split is approved by our stockholders, and the Board or a committee of the Board determines it is in the best interests of the Company to effect the split, the reverse stock split would become effective at such time as the amendment to the Company's Certificate of Incorporation, the form of which is attached as *Appendix D* to this proxy statement, is filed with the Secretary of State of Delaware. Upon the filing of the amendment, all of our existing common stock will be converted into new common stock as set forth in the amendment.

As soon as practicable after the Effective Date, stockholders will be notified that the reverse split has been effected. Computershare Inc., the Company's transfer agent, will act as exchange agent for purposes of implementing the exchange of stock certificates. Holders of pre-reverse split shares will be asked to surrender to the exchange agent certificates representing pre-reverse split shares in exchange for certificates representing post-reverse split shares in accordance with the procedures to be set forth in a letter of transmittal that will be delivered to the Company's stockholders. No new certificates will be issued to a stockholder until the stockholder has surrendered to the exchange agent his, her or its outstanding certificate(s) together with the properly completed and executed letter of transmittal. **STOCKHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATE AND SHOULD NOT SUBMIT ANY CERTIFICATE UNTIL REQUESTED TO DO SO.** Stockholders whose shares are held by their broker do not need to submit old share certificates for exchange. These shares will automatically reflect the new quantity of shares based on the reverse split. Beginning on the Effective Date, each certificate representing pre-reverse split shares will be deemed for all corporate purposes to evidence ownership of post-reverse split shares.

### ***Fractional Shares***

We will not issue fractional certificates for post-reverse split shares in connection with the reverse split. In lieu of issuing fractional shares, we may either (i) directly pay each stockholder who would otherwise have been entitled to a fraction of a share an amount in cash equal to the closing sale price of the common stock, as quoted on NASDAQ on the Effective Date, multiplied by the fractional share amount, or (ii) make arrangements with the transfer agent to aggregate all fractional shares otherwise issuable in the reverse stock split and sell these whole shares as soon as possible after the Effective Date at then prevailing market prices on the open market on behalf of those holders, and then pay each such holder his, her or its pro rata portion of the sale proceeds.

### ***No Dissenter's Rights***

Under the Delaware General Corporation Law, stockholders will not be entitled to dissenter's rights with respect to the proposed amendment to the charter to effect the reverse stock split, and we do not intend to independently provide stockholders with any such right.

### ***Certain U.S. Federal Income Tax Consequences of the Reverse Stock Split***

The following is a summary of certain U.S. federal income tax consequences relating to the reverse stock split as of the date hereof. This summary addresses only U.S. holders who hold their common stock as a capital asset for U.S. federal income tax purposes (i.e., generally, property held for investment).

---

## **Table of Contents**

For purposes of this summary, a U.S. holder means a beneficial owner of common stock who is any of the following for U.S. federal income tax purposes: (i) an individual who is a citizen or resident of the United States, for U.S. federal income tax purposes, (ii) a corporation created or organized in or under the laws of the United States, any state thereof, or the District of Columbia, (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source, or (iv) a trust if (1) its administration is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all of its substantial decisions, or (2) it has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

This summary is based on interpretations of the Internal Revenue Code of 1986, as amended (the Code), and regulations, rulings and judicial decisions as of the date hereof. These authorities may be changed, perhaps retroactively, and may adversely affect the U.S. federal income tax consequences described herein. This summary does not discuss all of the tax consequences that may be relevant to particular stockholders or to stockholders subject to special treatment under U.S. federal income tax laws.

Moreover, this description does not address the U.S. federal estate and gift tax, alternative minimum tax, state, local, foreign or other tax consequences of the reverse stock split.

**Each stockholder should consult their own tax adviser concerning the particular U.S. federal tax consequences of the reverse stock split, as well as any consequences arising under the laws of any other taxing authority, such as any state, local or foreign income tax consequences to which they may be subject.**

**To ensure compliance with Treasury Department Circular 230, each holder of common stock is hereby notified that: (a) any discussion of U.S. federal tax issues in this proxy statement is not intended or written to be used, and cannot be used, by such holder for the purpose of avoiding penalties that may be imposed on such holder under the Code; (b) any such discussion has been included by the Company in furtherance of the reverse stock split on the terms described herein; and (c) each such holder should seek advice based on its particular circumstances from an independent tax advisor.**

Generally, a reverse stock split will not result in the recognition of gain or loss by a U.S. holder for U.S. federal income tax purposes (except to the extent of cash received in lieu of a fractional share). The aggregate adjusted basis of the post-reverse split shares will be the same as the aggregate adjusted basis of the pre-reverse split shares, reduced by the amount of the adjusted basis of pre-reverse split shares that is allocated to any fractional share for which cash is received. The holding period of the post-reverse split shares will include a U.S. holder's holding periods for the pre-reverse split shares. A stockholder who receives cash in lieu of a fractional share generally will recognize taxable gain or loss equal to the difference, if any, between the amount of cash received and the amount of the stockholder's aggregate adjusted tax basis in pre-reverse split shares that is allocated to a fractional share. In general, the gain or loss resulting from the payment of cash in lieu of the issuance of a fractional share will be taxed as capital gain or loss. Such capital gain or loss will be short term if the pre-reverse split shares were held for one year or less and long term if held for more than one year.

The Company will not recognize any gain or loss as a result of the reverse stock split.

### ***Approval Required***

The affirmative vote of the holders of a majority of the shares of the Company's capital stock outstanding as of the Record Date is required to approve the amendment of the Company's Certificate of Incorporation to effect a reverse stock split of the common stock in the range of 1:5 to 1:15. Abstentions and broker non-votes will not be counted as having been voted on the proposal, and therefore will have the same effect as negative votes.

### ***Recommendation of the Board***

**OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR APPROVAL OF PROPOSAL NO. 2.**

**Table of Contents**

**PROPOSAL NO. 3**

**APPROVAL OF AMENDMENT TO THE COMPANY S CERTIFICATE OF INCORPORATION**

**TO INCREASE THE AUTHORIZED SHARES OF COMMON STOCK**

***Introduction***

Under Delaware law, we may only issue shares of common stock to the extent such shares have been authorized for issuance under our Certificate of Incorporation. Our Certificate of Incorporation currently authorizes the issuance of up to one hundred thirty-five million (135,000,000) shares of common stock. The Board of Directors has approved, subject to stockholder approval, an amendment to our Certificate of Incorporation to increase the number of authorized shares of common stock from one hundred and thirty-five million (135,000,000) to two hundred and fifty million (250,000,000). The Board of Directors has determined that this amendment is advisable and in the best interests of us and our stockholders. A form of this amendment to our Certificate of Incorporation is attached as Appendix E to this proxy statement. As of December 3, 2007, 73,126,584 shares of our common stock are issued and outstanding.

***Purpose of the Increase in Authorized Shares of Common Stock***

The Board believes that it is desirable to increase the number of authorized shares of common stock in order to (i) meet its current share issuance obligations and (ii) ensure that there is a sufficient number available to provide the Company with adequate flexibility to issue common stock for proper corporate purposes that may be identified in the future, including any equity financing transactions.

The Company is obligated, and may potentially be required, to issue and reserve additional shares of its common stock (as calculated prior to giving effect to any reverse stock split described in Proposal No. 2 above), among other transactions, as follows:

18,428,221 shares of common stock issuable upon conversion of the Notes and exercise of the Warrants;

2,157,042 shares of common stock issuable upon exercise of options and warrants issued in financing transactions prior to the Debt Financing; and

20,693,167 shares of our common stock reserved for issuance under our employee compensation plans, including 1997 Stock Incentive Plan and The Epoch Biosciences, Inc. 2003 Stock Incentive Plan.

In addition, if we satisfy certain conditions set forth in the Indenture, we may issue shares of common stock to holders as interest payment for the Notes. Furthermore, we have agreed to reserve, out of our authorized and unissued common stock, a number of shares of our common stock for the Notes and Warrants equal to 120% of the total number of shares that may be issued upon conversion of the Notes and exercise of the Warrants pursuant to the terms of the Debt Financing. We estimate that as of the date of this Proxy Statement, we are required to reserve approximately 40,000,000 shares of common stock pursuant to the terms of the Debt Financing.

As a result of the foregoing obligations, plus the potential issuance of our common stock in future equity financing transactions, without the increase in authorized stock, we may not have a sufficient number of shares of common stock. The Board of Directors believes that our obligations to issue and reserve additional shares of common stock, including the requirements under the terms of the Notes and Warrant, can be bettered satisfied by increasing the authorized number of shares of Common Stock.

The additional shares of common stock could be used for other important corporate purposes, including public or private financings to raise additional capital, acquisition of other companies and for stock-based employee benefit plans. It is critical for the Company to raise more money in the immediate future to continue its business operations and fund its research and development activities. If the proposed amendment is adopted, the newly authorized shares would be available for issuance by the Company in a financing transaction without

## **Table of Contents**

further stockholder action, except as provided by Delaware law or the rules of any stock exchange or automated quotation system on which the Company's common stock may then be listed or quoted. Since we will need to raise capital to fund our operations, the increase would ensure that we have sufficient number of shares for future equity financing transactions. All of the additional shares resulting from the proposed increase in the Company's authorized common stock would be of the same class if and when they are issued, and holders would have the same rights and privileges as holders of shares of common stock presently issued and outstanding, including the same dividend, voting and liquidation rights.

The holders of the Company's common stock do not have preemptive rights to subscribe to additional securities that may be issued by the Company, which means that current stockholders do not have a prior right to purchase any additional shares in connection with a new issuance of capital stock of the Company in order to maintain their proportionate ownership of the Company's common stock. Accordingly, if the Board elects to issue additional shares of common stock, such issuance could have a dilutive effect on the earnings per share, voting power, and equity ownership of current stockholders. In addition, each share of common stock is entitled to one vote in the election of directors and other matters. The holders of the Company's common stock are not entitled to cumulative voting.

### ***Effect of the Increase***

There were 73,126,584 shares of our common stock issued and outstanding as of December 3, 2007, leaving approximately 176,873,416 shares of our common stock available for future issuance after approval of the increase in the authorized number of shares of common stock. The par value of our common stock will remain \$0.001 per share. The terms of the additional shares of common stock will be identical to those of the currently outstanding shares of common stock. This amendment will not alter the current number of issued shares. The relative rights and limitations of the shares of common stock would remain unchanged under such amendment. In addition, the authorized number of shares of common stock after the increase will not be proportionally adjusted in the event of a reverse stock split effected pursuant to the approval of Proposal No. 2.

### ***Effect of the Proposed Increase on Existing Stockholders***

The increase in authorized common stock will not have any immediate effect on the rights of existing stockholders. However, the Board of Directors will have the authority to issue common stock without requiring future stockholders approval of such issuances, except as may be required by applicable law or the requirements of the NASDAQ Stock Market. To the extent that additional shares are issued in the future, they would decrease the existing stockholders' percentage equity ownership and, depending on the price at which they are issued, could be dilutive to the existing stockholders.

The increase in the authorized number of shares of common stock and the subsequent issuance of such shares could have the effect of delaying or preventing a change in control of the Company without further action by the stockholders. Shares of authorized and unissued common stock could, within the limits imposed by applicable law, be issued in one or more transactions which would make a change in control of the Company more difficult, and therefore less likely. Any such issuance of additional stock could have the effect of diluting the earnings per share and book value per share of outstanding shares of common stock, and such additional shares could be used to dilute the stock ownership or voting rights of a person seeking to obtain control of the Company. Our Board of Directors is not currently aware of any attempt to take over or acquire us. While it may be deemed to have potential anti-takeover effects, the proposed amendment to increase the authorized common stock is not prompted by any specific effort or takeover threat currently perceived by management.

### ***Procedure for Effecting Increase***

If the increase in authorized shares of common stock is approved by our stockholders, the increase would become effective at such time as the amendment to the Company's Certificate of Incorporation, in the form attached as Appendix E to this proxy statement, is filed with the Secretary of State of Delaware.

**Table of Contents**

***Approval Required***

The affirmative vote of the holders of a majority of the shares of the Company's capital stock outstanding as of the Record Date is required to approve the amendment of the Company's Certificate of Incorporation to effect an increase in the number of authorized shares of common stock. Abstentions and broker non-votes will not be counted as having been voted on the proposal, and therefore will have the same effect as negative votes.

***Recommendation of the Board***

**OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR APPROVAL OF PROPOSAL NO. 3.**



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

The following table sets forth information as of December 3, 2007 (except as noted below) as to our shares of common stock beneficially owned by (i) each of our directors, (ii) each of our executive officers, (iii) our current directors and executive officers as a group and (iv) each person known by us to be the beneficial owner of more than 5% of the outstanding shares of our common stock. Unless otherwise indicated, the beneficial ownership consists of sole voting and investment power with respect to the shares indicated, except to the extent that a spouse shares authority under applicable law. Except for shares of common stock held in brokerage accounts, which may, from time to time together with other securities in the account, serve as collateral for margin loans made in such accounts, none of the shares reported as beneficially owned have been pledged as security for any loan or indebtedness.

	<b>Beneficial Ownership</b>	
	<b>of Common Stock<sup>(1)</sup></b>	
	<b>Number of</b>	<b>Percentage of</b>
	<b>Shares</b>	<b>Class</b>
Fisher Scientific International, Inc. <sup>(2)</sup> Liberty Lane	5,660,377	7.7%
Hampton, NH 03842		
Howard C. Birndorf <sup>(3)</sup>	2,065,552	2.8%
David G. Ludvigson <sup>(4)</sup>	811,213	1.1%
Robert Saltmarsh <sup>(5)</sup>		