
**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
(Amendment No. [])**

Filed by the Registrant ☒

Filed by a Party other than the Registrant ☐

Check the appropriate box:

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

InVivo Therapeutics Holdings Corp.

(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.
- ☐ 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:



**One Broadway, 14th Floor
Cambridge, MA 02142**

April 20, 2012

Dear InVivo Shareholders:

I am pleased to invite you to attend the 2012 Annual Meeting of Shareholders (the "Annual Meeting") of InVivo Therapeutics Holdings Corp., to be held on Wednesday, May 30, 2012 at 10:00 a.m., local time, at our corporate offices located at One Broadway, 14th Floor, Cambridge, Massachusetts 02142.

Specific details regarding admission to the meeting and the business to be conducted at the Annual Meeting are included in the Notice of Annual Meeting of Shareholders and Proxy Statement. We encourage you to carefully read these materials, as well as the enclosed Annual Report to Shareholders for the fiscal year ended December 31, 2011. Our Board of Directors recommends that you vote in favor of each of the director nominees and for each other proposal set forth in the Notice of Annual Meeting and Proxy Statement.

Your vote is important. Whether or not you plan to attend the Annual Meeting, please vote as soon as possible. As an alternative to voting in person at the Annual Meeting, you may vote by completing and returning the proxy card. Voting by either of these methods will ensure your representation at the Annual Meeting.

Thank you for your continued support.

Sincerely,

A handwritten signature in black ink that reads "Frank Reynolds". The signature is fluid and cursive, with the first and last names clearly legible.

FRANK M. REYNOLDS
Chief Executive Officer and Chief Financial Officer

INVIVO THERAPEUTICS HOLDINGS CORP.

**One Broadway, 14th Floor
Cambridge, MA 02142**

**NOTICE OF ANNUAL MEETING OF SHAREHOLDERS
To Be Held On Wednesday, May 30, 2012**

To the Shareholders of InVivo Therapeutics Holdings Corp.:

Notice is hereby given that the Annual Meeting of Shareholders (the "Annual Meeting") of InVivo Therapeutics Holdings Corp., a Nevada corporation, will be held on Wednesday, May 30, 2012 at 10:00 a.m., local time, at our corporate offices located at One Broadway, 14th Floor, Cambridge, Massachusetts 02142, for the following purposes:

1. To consider and vote upon a proposal to elect one Class I director to hold office for a three-year term ending at the annual meeting of shareholders in 2015 and until his successor is duly elected and qualified;
2. To consider and vote upon a proposal to approve and adopt an amendment to our 2010 Equity Incentive Plan to increase the number of shares of common stock available for issuance thereunder from 3,500,000 shares to 6,500,000 shares;
3. To consider and vote upon a proposal to ratify the appointment of Wolf & Company, P.C., an independent registered public accounting firm, as the independent auditor of our company for the fiscal year ending December 31, 2012; and
4. To transact such other business as may properly come before the Annual Meeting or any adjournments or postponements thereof.

The Board of Directors has no knowledge of any other business to be transacted at the Annual Meeting.

Admission of shareholders to the Annual Meeting will be on a first-come, first-served basis, and picture identification will be required to enter the Annual Meeting. An individual arriving without picture identification will not be admitted unless it can be verified that the individual is an InVivo shareholder. Use of cameras, cellular phones, recording equipment and other electronic devices will not be permitted at the Annual Meeting. We reserve the right to inspect any persons or items prior to their admission to the Annual Meeting.

Only shareholders of record as of the close of business on Wednesday, April 18, 2012 are entitled to notice of, and to vote at, the Annual Meeting. All shareholders are cordially invited to attend the meeting.

By order of the Board of Directors,



LAUREN MITAROTONDO
Secretary

Cambridge, Massachusetts
April 20, 2012

YOUR VOTE IS IMPORTANT

In order to ensure your representation at the Annual Meeting, please submit your proxy and voting instructions by completing, signing and dating the proxy card as promptly as possible and returning it in the enclosed envelope (to which no postage needs to be affixed if mailed in the United States). Please refer to the section entitled "Voting Instructions" of the proxy statement for a description of the voting instructions.

INVIVO THERAPEUTICS HOLDINGS CORP.

PROXY STATEMENT

*For the Annual Meeting of Shareholders
To Be Held On Wednesday, May 30, 2012*

General

This proxy statement (this “Proxy Statement”) is furnished in connection with the solicitation of proxies by the Board of Directors (the “Board of Directors,” or “Board”) of InVivo Therapeutics Holdings Corp., a Nevada corporation, for use at its 2012 Annual Meeting of Shareholders (the “Annual Meeting”), which will be held on Wednesday, May 30, 2012 at 10:00 a.m., local time, at our corporate offices located at One Broadway, 14th Floor, Cambridge, Massachusetts 02142, and at any adjournments or postponements thereof, for the purposes set forth in the Notice of Annual Meeting of Shareholders. You may obtain directions to the location of our Annual Meeting by writing or calling our Investor Relations Department at One Broadway, 14th Floor, Cambridge, MA 02142, or telephone (617) 475-1520.

On or about April 23, 2012, we are mailing this proxy statement and proxy card together with an annual report consisting of our Annual Report on Form 10-K for the fiscal year ended December 31, 2011 and other information required by the rules of the Securities and Exchange Commission, or the SEC. Our principal executive offices are located at One Broadway, 14th Floor, Cambridge, MA 02142 and our telephone number is (617) 475-1520.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to Be Held on May 30, 2012: Pursuant to rules promulgated by the SEC, we have elected to provide access to our proxy materials both by sending you this full set of proxy materials including a proxy card, and by notifying you of the availability of our proxy materials on the Internet. This Proxy Statement, the Notice of Meeting and our 2011 Annual Report are available at www.cstproxy.com/invivotherapeutics/2012.

Solicitation

The cost of soliciting proxies, including expenses in connection with preparing, printing and mailing of the Notice of Annual Meeting of Shareholders, this Proxy Statement, and any additional solicitation material will be borne by our company. We may engage a paid proxy solicitor to assist in the solicitation. Copies of solicitation materials will be furnished to brokerage houses, nominees, fiduciaries and custodians to forward to beneficial owners of our common stock held in their names. In addition to the solicitation of proxies by mail, our directors, officers and other employees may, without additional compensation, solicit proxies by telephone, facsimile, electronic communication and personal interviews. We will also reimburse banks, brokerage firms and other custodians, nominees and fiduciaries for reasonable expenses incurred by them in sending proxy materials to shareholders.

Record Date, Voting Securities and Votes Required

Only holders of record of our common stock as of the close of business on Wednesday, April 18, 2012 will be entitled to receive notice of, and vote at, the Annual Meeting and any adjournments or postponements thereof. As of the record date, there were 63,954,093 shares of our common stock issued and outstanding and entitled to vote at the Annual Meeting. The holders of our common stock are entitled to one vote for each share held as of the record date on any proposal presented at the Annual Meeting.

A majority of the shares of our common stock issued and outstanding, present in person or represented by proxy at the Annual Meeting and entitled to vote at the Annual Meeting will constitute a quorum at the Annual Meeting. Votes withheld, abstentions and broker non-votes (as described below) shall be counted for purposes of determining the presence or absence of a quorum for the transaction of business at the Annual Meeting.

The affirmative vote of the holders of a plurality of the votes cast at the Annual Meeting is required for the election of Class I director (Proposal No. 1). For the remainder of the proposals (Proposal No. 2 and Proposal No. 3), the number of votes cast at the Annual Meeting in favor of the proposal must exceed the number of votes cast in opposition to such proposal in order for the proposals to be approved.

Shares which abstain from voting on a particular matter and shares held in “street name” by brokers or nominees who indicate on their proxies that they do not have discretionary authority to vote such shares as to a particular matter (“broker non-votes”) will not be counted as votes in favor of such matter and will also not be counted as votes cast or shares voting on such matter. Accordingly, neither abstentions nor broker non-votes will have any effect upon the outcome of voting with respect to any of the proposals to be presented at the Annual Meeting.

Voting Instructions

Included with these proxy materials is a proxy card or a voting instruction card from your bank, broker or other nominee for the Annual Meeting, with instructions for voting by mail.

Those shareholders who elect to vote by mail, should complete, sign and return the proxy card in the prepaid and addressed envelope that was enclosed with the proxy materials, and the shares will be voted at the Annual Meeting in the manner directed. If you complete, sign and return your proxy card, it will be voted as you direct. In the event no choice is specified on a signed proxy card, the persons named as proxies will vote:

- **FOR** the election of Dr. Richard J. Roberts to our Board of Directors as a Class I director;
- **FOR** the approval and adoption of the amendment to our 2010 Equity Incentive Plan;
- **FOR** the ratification of the appointment of Wolf & Company, P.C. as the independent auditor of our company for the fiscal year ending December 31, 2012; and
- In their discretion as to any other matter that may be properly brought before the Annual Meeting or any adjournments thereof.

If the shares you own are held in “street name” by a bank, broker or other nominee, that person, as the record holder of your shares, is required to vote your shares according to your instructions. Your bank, broker or other nominee will send you directions on how to vote those shares. Under applicable stock exchange rules, if you do not give instructions to your bank, broker or other nominee, it will still be able to vote your shares with respect to certain “discretionary” items, but will not be allowed to vote your shares with respect to certain “non-discretionary” items. In the case of “non-discretionary” items, the shares that do not receive voting instructions will be treated as “broker non-votes”, the effect of which is discussed above in the section entitled “Record Date, Voting Securities and Votes Required.” As a result, brokers, banks and other nominees may no longer use discretionary authority to vote shares on the election of directors or the proposal to approve the amendment to our 2010 Equity Incentive Plan if they have not received specific voting instructions from their clients. For your vote to be counted on these proposals, you now will need to communicate your voting decisions to your broker, bank, or other nominee before the date of the Annual Meeting.

If you are a shareholder as of the record date and attend the meeting, you may personally deliver your completed proxy card or vote in person at the meeting.

Revocability of Proxy

You may revoke your proxy at any time before it is voted at the Annual Meeting by:

- notifying our Secretary in writing at our principal executive offices located at One Broadway, 14th Floor, Cambridge, MA 02142, Attention: Secretary, before the Annual Meeting that you have revoked your proxy; or
- attending the Annual Meeting and voting in person at the Annual Meeting.

If you plan to attend the Annual Meeting and wish to vote in person, we will give you a ballot at the meeting. However, if your shares are held in the name of your broker, bank or other nominee, you must bring a proxy from your nominee authorizing you to vote your “street name” shares held as of the record date.

A copy of our Annual Report on Form 10-K (with exhibits) has also been filed with the SEC and may be accessed from the SEC’s homepage at www.sec.gov or may be obtained without charge upon written request to InVivo Therapeutics Holdings Corp., One Broadway, 14th Floor, Cambridge, MA 02142, Attention: Secretary.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information as of April 15, 2012, with respect to the beneficial ownership of our common stock by the following:

- each person known by us to beneficially own more than 5% of the outstanding shares of our common stock;
- each of our named executive officers (as defined in “Executive Compensation”) and directors; and
- all of our executive officers and directors as a group.

Unless otherwise indicated in the footnotes to the following table, each person named in the table has sole voting and investment power and that person’s address is c/o InVivo Therapeutics Holdings Corp., One Broadway, 14th Floor, Cambridge, Massachusetts 02142. Shares of our common stock subject to options or warrants currently exercisable or exercisable within 60 days of April 15, 2012 are deemed outstanding for computing the share ownership and percentage of the person holding such options and warrants, but are not deemed outstanding for computing the percentage of any other person. The percentage ownership of our common stock of each person or entity named in the following table is based on 63,928,372 shares of our common stock outstanding as of April 15, 2012, plus any shares subject to options or warrants currently exercisable or exercisable within 60 days of April 15, 2012 held by such person.

Name of Beneficial Owner	Number of Shares of Common Stock Beneficially Owned	Percentage of Common Stock Beneficially Owned
5% Shareholders		
Robert S. Langer	8,056,953	12.6%
Kevin Kimberlin(1)	4,461,537	6.7%
Directors and Named Executive Officers		
Frank Reynolds(2)	14,906,372	23.1%
Adam K. Stern(3)	3,570,524	5.5%
Dr. Richard J. Roberts(4)	911,563	1.4%
George Nolen(5)	156,968	*
Christi Pedra(6)	187,951	*
Dr. Edward Wirth	—	—
All directors and executive officers as a group (6 persons)	19,786,503	29.5%

* Less than one percent.

- (1) Represents (i) 1,947,321 shares held by Optical Partners, LLC and (ii) 2,514,216 shares underlying warrants held by Spencer Trask Ventures, Inc. The address for Mr. Kimberlin is c/o Spencer Trask Ventures, Inc., 750 Third Avenue, 11th Floor, New York, New York 10017.
- (2) Includes 528,712 shares issuable upon the exercise of stock options.
- (3) Includes (i) 1,245,802 shares underlying warrants held by Mr. Stern; (ii) 801,507 shares held by ST Neuroscience Partners, LLC; (iii) 150,000 shares underlying warrants held by ST Neuroscience Partners, LLC; (iv) 475,079 shares held by Pavilion Capital Partners, LLC; (v) 323,053 shares held by Piper Venture Partners, LLC; and (vi) 75,000 shares issuable upon the exercise of stock options held by Mr. Stern.
- (4) Represents shares issuable upon the exercise of stock options.
- (5) Includes (i) 10,000 shares underlying warrants and (ii) 30,984 shares issuable upon the exercise of stock options.
- (6) Includes (i) 10,000 shares underlying warrants and (ii) 167,951 shares issuable upon the exercise of stock options.

PROPOSAL NO. 1
ELECTION OF CLASS I DIRECTOR

Our Board of Directors currently has five members serving on a classified board, consisting of two Class I directors (term expiring at this Annual Meeting), two Class II directors (term expiring at our 2013 annual meeting of shareholders) and one Class III director (term expiring at our 2014 annual meeting of shareholders). At each annual meeting of our shareholders, directors are elected for a full term of three years to succeed those whose terms are expiring, unless a director is elected to a class which has a term expiring in less than three years, in which case the director will be elected for the remainder of the term of such class.

On April 3, 2012, Ms. Christi M. Pedra, a current Class I director, informed our company that she will not stand for re-election at the Annual Meeting. Ms. Pedra will serve out her current term as a director, and following the Annual Meeting there will be a vacancy in Class I.

The persons named in the enclosed proxy will vote to elect Dr. Richard J. Roberts as Class I director unless the proxy is marked otherwise. Dr. Roberts will be elected to hold office until the 2015 annual meeting of shareholders and until his successor is elected and qualified. Dr. Roberts has agreed to serve if elected. However, if for some reason he is unable to accept nomination, or election, proxies will be voted for the election of a nominee designated by our Board of Directors.

Biographical and certain other information concerning our nominee for re-election to the Board and our other directors is set forth below. Information with respect to the number of shares of common stock beneficially owned by each director, as of April 15, 2012, appears above in the section entitled "Security Ownership of Certain Beneficial Owners and Management." No director or executive officer is related by blood, marriage or adoption to any other director or executive officer.

The Board of Directors recommends a vote FOR the election of Dr. Richard J. Roberts as a Class I director.

Nominee for Election to the Board as Class I Director

Dr. Richard J. Roberts, Ph.D., 68, has been a director of our company since October 2010 and a director of InVivo Therapeutics Corporation, our wholly-owned subsidiary, since November 2008. Dr. Roberts has been the Chief Scientific Officer at New England Biolabs since July 1, 2005. Dr. Roberts joined InVivo Therapeutics Corporation's Scientific Advisory Board in June 2007. He was awarded the 1993 Nobel Prize in Physiology or Medicine along with Phillip Allen Sharp for the discovery of introns in eukaryotic DNA and the mechanism of gene-splicing. He holds a B.Sc. in Chemistry and a Ph.D. in Organic Chemistry from the University of Sheffield, U.K. Dr. Roberts has discovered and cloned restriction enzymes and been involved in studies of Adenovirus-2, beginning with studies of transcription that led to the discovery of split genes and mRNA splicing. His laboratory has pioneered the application and development of computer methods for protein and nucleic acid sequence analysis that continues to be a major research focus for Dr. Roberts. In determining that Dr. Roberts should continue serving as a director of our company, our Board of Directors considered his experience and understanding of the science and technology involved in our business.

Current Class II Directors

George Nolen, our lead director, 55, has been a director of our company since October 2010 and a director of InVivo Therapeutics Corporation, our wholly-owned subsidiary, since December 2009. Mr. Nolen is currently a senior managing director at Madison Capital Partners, a private investment firm he joined in October 2010. From 2004 until his retirement in August 2009, Mr. Nolen was the President and Chief Executive Officer of Siemens Corporation, the U.S. subsidiary of Siemens, AG. Prior to his role at Siemens USA, Mr. Nolen held numerous roles in Siemens including President of Siemens' Information and Communications division,

overseeing this business from 1998 to 2004. He is a graduate of Virginia Tech, where he currently serves as the Rector of the University's Board of Visitors. Mr. Nolen brings to the Board extensive leadership and business experience through his successful and long-running career at Siemens.

Adam K. Stern, 48, has been a director of our company since October 2010 and was designated as such by Spencer Trask Ventures, an investment banking firm. Mr. Stern is Senior Managing Director of Spencer Trask, and has over 20 years of venture capital and investment banking experience focusing primarily on the technology and life science sectors of the capital markets. He currently manages the structured finance group of Spencer Trask. Mr. Stern joined Spencer Trask in September 1997 from Josephthal & Co., members of the New York Stock Exchange, where he served as Senior Vice President and Managing Director of Private Equity Marketing and held increasingly responsible positions from 1989 to 1997. He has been a licensed securities broker since 1987 and a General Securities Principal since 1991. Mr. Stern is a director of Organovo Holdings, Inc., a development stage, biopharmaceutical public company, and he also served as a director of PROLOR Biotech, Inc., a development stage biopharmaceutical public company from May 2007 until June 2011. Mr. Stern also currently sits on the boards of various private companies. Mr. Stern holds a Bachelor of Arts degree with honors from The University of South Florida in Tampa. Mr. Stern brings to the Board extensive financial experience through his career in the financial sector. Pursuant to the terms of a placement agency agreement between our company and Spencer Trask Ventures, until December 3, 2012, Spencer Trask has the right to designate one member to our Board of Directors, and Mr. Stern is the designee.

Current Class III Director

Frank M. Reynolds, 49, has been our Chairman of the Board of Directors, Chief Executive Officer, President and Chief Financial Officer since October 2010 and CEO of InVivo Therapeutics Holdings Corp., our wholly-owned subsidiary, since 2005. He is an Executive Board Member of the Irish American Business Chamber and has served on the board of the Special Olympics of Massachusetts, Philadelphia Cares, and Wharton Consulting Partners. Mr. Reynolds brings to the Board over 25 years of executive management experience. From November 2002 until May 2005, he was the Director of Global Business Development at Siemens Corporation where he had global responsibilities for new business. In 1999, he founded and served as CEO of Expand the Knowledge, Inc., an IT consulting company with a focus on life sciences. Mr. Reynolds filed for personal bankruptcy in 2003, which was discharged in August 2003. Mr. Reynolds suffered an injury to his spine in 1992. While recovering from this injury, he took the opportunity to earn two Master's degrees and he currently holds a Master of Business Administration from Sloan Fellows Program in Global Innovation and Leadership — 2006, Massachusetts Institute of Technology; a Master's of Science in Technology Management — 2005, The Wharton School of Business, University of Pennsylvania; a Master's of Science in Engineering — 2003, University of Pennsylvania; a Master's of Science in Management Information Systems — 2001, Temple University; a Master's of Science in Health Administration — 1996; Saint Joseph's University; and a Master's of Science in Psychology — 1994, Chestnut Hill College. He also has a Bachelor of Science in Marketing — 1984, Rider University. In addition to his management experience, Mr. Reynold's executive role at our company provides him a deep knowledge of the day-to-day business and long-term strategy of our company.

Independence of Members of the Board

We are not currently listed on any national securities exchange or quoted on an inter-dealer quotation system that has a requirement that the Board of Directors be independent. However, in evaluating the independence of the members and the composition of the committees of our Board of Directors, the Board of Directors utilizes the definition of “independence” as that term is defined by the listing standards of the Nasdaq Stock Market and applicable SEC rules, including the rules relating to the independence standards of an audit committee and the non-employee director definition of Rule 16b-3 promulgated under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Using these standards, the Board of Directors has determined that Mr. Nolen, Dr. Roberts and Ms. Pedra are currently “independent” directors. The Board of Directors has determined that Mr. Stern is not independent as a result of our payments to Spencer Trask, and that Mr. Reynolds is not independent as a result of his employment relationship with our company.

Board Meetings and Attendance

The Board of Directors held four meetings during fiscal year 2011. All directors attended more than seventy-five percent of the meetings. All directors attended in excess of 75% of the meetings of the committees of our Board of Directors on which they served. Our directors are encouraged, but not required, to attend our annual meetings of shareholders. All of our directors attended our 2011 annual meeting of shareholders, and we expect that all of our directors will attend this Annual Meeting.

Board Leadership Structure

The Board of Directors does not have a policy on whether the offices of Chairman and Chief Executive Officer should be separate and, if they are to be separate, whether the Chairman should be selected from among the independent directors or should be an employee of our company. In the event the Chairman is not an independent director, the Board of Directors may designate a lead independent director. The duties of the lead independent director, as set forth in our Corporate Governance Guidelines, include (i) chairing any meeting of the independent directors in executive session, (ii) facilitating communications between other members of the Board of Directors and the Chairman (however, each director is free to communicate directly with the Chairman), (iii) in the event a shareholder seeks to communicate with the Board of Directors, accepting and responding to such communications in conjunction with the Chairman, and (iv) working with the Chairman (a) in the preparation of the agenda for each board meeting, (b) in scheduling the time devoted to matters at each board meeting and (c) as required, in determining the need for special meetings of the Board of Directors. The appointment of lead independent director rotates among the independent directors, but no more frequently than annually, and the Board of Directors periodically reviews the matter to determine if and when a rotation is advisable.

The Board of Directors has determined that a board leadership structure featuring a single leader as Chairman and Chief Executive Officer currently best serves our interests and those of our shareholders. The combined role promotes consistent and unified leadership, timely decision-making, strategy development and execution and effective management of company resources. The combined role also facilitates information flow between management and the Board of Directors. Combining the roles of Chairman and Chief Executive Officer makes clear that the individual serving in these roles has primary responsibility for managing our business, under the oversight and review of the Board of Directors. The Chief Executive Officer is the individual with primary responsibility for implementing our strategy, directing the work of other executive officers and leading implementation of our strategic plans as approved by the Board of Directors. This structure results in a single leader being directly accountable to the Board of Directors and, through the Board of Directors, to shareholders, and enables the Chief Executive Officer to act as the key link between the Board of Directors and other members of management. In light of the combined role of Chairman and Chief Executive Officer, the Board of Directors has also determined to appoint a lead independent director, who is currently George Nolen.

Committees of the Board

The Board has designated two principal standing committees, the Audit Committee and the Governance, Nominating and Compensation Committee.

Audit Committee

Our Board of Directors has a standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. The Audit Committee assists the Board of Directors in fulfilling its responsibilities to shareholders concerning our financial reporting and internal controls. The Audit Committee facilitates open communication among the Audit Committee, the Board of Directors, our independent auditor and management. The Audit Committee discusses with management and our independent auditor the financial information developed by us, our systems of internal controls and our audit process. The Audit Committee is solely and directly responsible for appointing, evaluating, retaining, and, where necessary, terminating the engagement of our independent auditor. The independent auditor meets with the Audit Committee (both with and without the presence of our management) to review and discuss various matters pertaining to the audit, including our financial statements, the report of the independent registered public accounting firm on the results, scope and terms of their work, and their recommendations concerning the financial practices, controls, procedures and policies employed by us. The current members of our Audit Committee are George Nolen, Chairman, Dr. Richard J. Roberts, and Christi Pedra. The Audit Committee held four meetings in fiscal year 2011.

The Audit Committee pre-approves all audit services to be provided to us by the principal auditor and all other services (including reviewing, attestation and non-audit services) to be provided to us by the independent registered public accounting firm.

The Audit Committee is charged with establishing procedures for (i) the receipt, retention and treatment of complaints received by us regarding accounting, internal accounting controls or auditing matters; and (ii) the confidential, anonymous submission by our employees of concerns regarding questionable accounting or auditing matters. The Audit Committee reviews and oversees all related party transactions on an ongoing basis. The Audit Committee is authorized, without further action by the Board of Directors, to engage independent legal, accounting and other advisors as it deems necessary or appropriate to carry out its responsibilities. The Board of Directors has adopted a written charter for the Audit Committee, a copy of which is available on our website.

The Board of Directors has determined that all of the members of the Audit Committee are independent (as defined by the listing standards of the Nasdaq Stock Market and the applicable SEC rules), and that the Audit Committee members meet the independence requirements contemplated by Rule 10A-3 under the Exchange Act. The Board has determined that George Nolen is an “audit committee financial expert” (as defined in Item 407(d)(5) of Regulation S-K).

Governance, Nominating and Compensation (“GNC”) Committee

The GNC Committee assists the Board in fulfilling its responsibilities relating to (i) compensation of our executive officers, (ii) the director nomination process and (iii) reviewing our compliance with SEC corporate governance requirements. The Board of Directors has adopted a written charter for the GNC Committee, a copy of which is available on our website. The Board of Directors has determined that all of the members of the GNC Committee are independent (as defined by the listing standards of the Nasdaq Stock Market and the applicable SEC rules). The current members of our GNC Committee are Christi Pedra, Chairperson, George Nolen and Dr. Richard J. Roberts. The GNC Committee held four meetings in fiscal year 2011.

The GNC Committee determines salaries, incentives and other forms of compensation for the Chief Executive Officer and our executive officers and reviews and makes recommendations to the Board with respect to director compensation. The GNC Committee annually reviews and approves the corporate goals and objectives relevant to the compensation of the Chief Executive Officer, evaluates the Chief Executive Officer’s

performance in light of these goals and objectives, and sets the Chief Executive Officer's compensation level based on this evaluation. The GNC Committee meets without the presence of executive officers when approving or deliberating on executive officer compensation, but may invite the Chief Executive Officer to be present during the approval of, or deliberations with respect to, other executive officer compensation. The GNC Committee reviews and approves the terms of any and all offer letters, employment agreements, severance agreements, change-in-control agreements, indemnification agreements and other material agreements between us and our executive officers. In addition, the GNC Committee administers our stock incentive compensation and equity-based plans.

The GNC Committee makes recommendations to the Board of Directors concerning all facets of the director nominee selection process. Generally, the GNC Committee identifies candidates for director nominees in consultation with management and the independent members of the Board of Directors, through the use of search firms or other advisers, through the recommendations submitted by shareholders or through such other methods as the GNC Committee deems to be helpful to identify candidates. Once candidates have been identified, the GNC Committee confirms that the candidates meet the independence requirements and qualifications for director nominees established by the Board of Directors. The GNC Committee may gather information about the candidates through interviews, questionnaires, background checks, or any other means that the GNC Committee deems to be helpful in the evaluation process. The GNC Committee meets to discuss and evaluate the qualities and skills of each candidate, both on an individual basis and taking into account the overall composition and needs of the Board of Directors. Upon selection of a qualified candidate, the GNC Committee would recommend the candidate for consideration by the full Board of Directors.

In considering whether to include any particular candidate in the slate of recommended director nominees, the Board of Directors will consider the candidate's integrity, education, business acumen, knowledge of our business and industry, experience, diligence, conflicts of interest and the ability to act in the interests of all shareholders. As a matter of practice, the Board of Directors considers the diversity of the backgrounds and experience of prospective directors as well as their personal characteristics (e.g., gender, ethnicity, age) in evaluating and making decisions regarding board composition in order to facilitate deliberations that reflect a broad range of perspectives. The Board of Directors does not assign specific weights to particular criteria and no particular criterion is a prerequisite for each prospective nominee. We believe that the backgrounds and qualifications of our directors, considered as a group, should provide a composite mix of experience, knowledge and abilities that will allow our Board of Directors to fulfill its responsibilities.

The GNC Committee will consider director candidates who are recommended by our shareholders. Such recommendation for nomination must be in writing and include the following:

- the name and address of the shareholder making the recommendation;
- the number of shares of our common stock that such shareholder owns beneficially and holds of record;
- the name and address of the individual recommended for consideration as a director nominee;
- the principal occupation and experience of the director nominee;
- the total number of shares of our common stock that the shareholder making the recommendation will vote for the director nominee;
- a written statement from the shareholder making the recommendation stating whether the director nominee has indicated his or her willingness to serve if elected and why such recommended candidate would be able to fulfill the duties of a director; and
- any other information regarding the director nominee that is required to be included in a proxy statement filed pursuant to the rules of the SEC.

Nominations must be sent to the GNC Committee by U.S. mail, courier or expedited delivery service to InVivo Therapeutics Holdings Corp., One Broadway, 14th Floor, Cambridge, Massachusetts 02142, Attn: Chair,

GNC Committee. The chair of the GNC Committee will then provide the nomination to the GNC Committee for consideration. Assuming that the required material has been provided on a timely basis, the GNC Committee will evaluate shareholder-recommended candidates by following substantially the same process, and applying substantially the same criteria, as it follows for candidates submitted by others.

Our Board's Role in Risk Oversight

We are a development stage company and as such have not yet developed a risk management policy or procedure. Generally, the entire Board of Directors, the Audit Committee and the GNC Committee are involved in overseeing our major risk exposures and monitor and assess those risks in reviews with management and with our outside advisors and independent registered public accounting firm. The Audit Committee reviews regulatory risk, operational risk and enterprise risk, particularly as they relate to financial reporting, on a regular basis with management, our independent registered public accounting firm and our outside consultants and advisors. In its regular meetings, the Audit Committee discusses the scope and plan for the internal audit and includes management in its review of accounting and financial controls, assessment of business risks and legal and ethical compliance programs. The GNC Committee monitors our governance and succession risk and our compensation policies and related risks by review with management and outside advisors.

Shareholder Communications with the Board

Shareholders may communicate with the Board of Directors or any individual member thereof by sending written communications to the following address: The Board of Directors, c/o Secretary, InVivo Therapeutics Holdings Corp., One Broadway, 14th Floor, Cambridge, Massachusetts 02142. The Secretary will forward all such correspondence accordingly, except for mass mailings, job inquiries, surveys, business solicitations or advertisements, personal grievances, matters as to which we tend to receive repetitive or duplicative communications, or patently offensive or otherwise inappropriate material.

Compensation of Directors

The Board of Directors has adopted a compensation policy for non-employee directors. The policy provides that each non-employee director shall be paid an annual retainer of \$25,000 per year (paid quarterly and delivered at each regularly scheduled quarterly Board meeting). In addition, the policy provides that the lead independent director, chairman of the GNC Committee and the chairman of the Audit Committee shall each receive an additional annual fee of \$5,000 (paid quarterly and delivered at each regularly scheduled quarterly Board meeting). Each non-employee director shall also receive \$1,000 for each in-person board meeting attended, \$500 for each telephonic board meeting attended, and \$500 for each board committee meeting attended. Each non-employee director will also receive an annual grant, on December 10 of each calendar year, of a nonqualified stock option under our 2010 Equity Incentive Plan to purchase up to 50,000 shares of our common stock at an exercise price equal to the closing price of our common stock on the date of grant, and that such option shall be exercisable as to 1/12 of the original number of shares subject to the option on the one-month anniversary of the grant date and shall be exercisable as to an additional 1/12 of the original number of shares subject to the option each monthly anniversary thereafter until fully vested on the 12-month anniversary of the grant date, provided that such director remains a director of our company on each such vesting date. On December 10, 2011, we issued stock options for 50,000 shares exercisable at \$2.26 per share to each of George Nolen, Dr. Richard J. Roberts, Christi Pedra and Adam Stern. The aggregate fair value for the 200,000 shares granted was \$286,080.

DIRECTOR COMPENSATION FOR FISCAL 2011

The following table sets forth compensation earned and paid to each non-employee director for service as a director during fiscal 2011.

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards \$(1)(2)	All Other Compensation (\$)	Total (\$)
George Nolen	\$ 45,500	—	\$62,790	—	\$108,290
Christi M. Pedra	\$ 40,500	—	\$62,790	—	\$103,290
Dr. Richard J. Roberts	\$ 35,500	—	\$62,790	—	\$ 98,290
Adam K. Stern	\$ 30,000	—	\$62,790	—	\$ 92,790

- (1) The amounts shown in this column represent the aggregate grant date fair value of awards computed in accordance with Financial Accounting Standards Board Accounting Standards Codification 718, not the actual amounts paid to or realized by the directors during fiscal 2011. The assumptions used in determining grant date fair value of these awards are set forth in Note 14 to our Consolidated Financial Statements appearing in our Annual Report on 10-K filed with the SEC for the period ended December 31, 2011.
- (2) As of December 31, 2011, the aggregate number of vested and unvested options to purchase shares of our common stock outstanding for each director was as follows: Mr. Nolen, 173,934 shares; Ms. Pedra, 223,935 shares; Dr. Roberts, 967,547 shares; and Mr. Stern, 100,000 shares.

Scientific and Business Advisory Boards

In addition to our executive officers and directors, we also have a Scientific Advisory Board and a Business Advisory Board that provide guidance our company. The Scientific Advisory Board reviews the progress of our company's product development and provides input to management regarding scientific issues relating to our product and potential markets. The Business Advisory Board provides business expertise and regulatory advice to our CEO and our company. Both boards are advisory only and do not have the power to make decisions on behalf of our company, and may but are not required to include officers, directors or employees of our company. We do not pay members of our advisory boards any cash compensation and plan to compensate members of the advisory boards through the issuance of stock options.

The following persons are the members of our advisory boards and hold the positions set forth opposite their respective names.

Dr. Edward D. Wirth	Chief Science Officer and Scientific Advisory Board Member
Dr. Richard J. Roberts	Director and Scientific Advisory Board Member
Dr. Robert S. Langer	Scientific Advisory Board Member
Dr. V. Reggie Edgerton	Scientific Advisory Board Member
Dr. Jonathan R. Slotkin	Scientific Advisory Board Member
Dr. Todd Albert	Scientific Advisory Board Member
Dr. David Feigal	Business Advisory Board Member

Dr. Edward D. Wirth III, 47, our Chief Science Officer, joined our company in December 2011. Additional biographical information concerning Dr. Wirth may be found below under the caption "Management."

Dr. Richard J. Roberts, PhD, has been a director of our company since October 2010 and joined the Scientific Advisory Board of InVivo Therapeutics Corporation our wholly-owned subsidiary, in June 2007. Additional biographical information concerning Dr. Roberts may be found above under Proposal No. 1, Election of Class I Director.

Robert S. Langer, ScD, Scientific Advisory Board Member, is the David H. Koch Institute Professor at the Massachusetts Institute of Technology (MIT). Dr. Langer has written over 1,100 articles. He also has

approximately 760 issued and pending patents worldwide. Dr. Langer's patents have been licensed or sublicensed to over 220 pharmaceutical, chemical, biotechnology and medical device companies. He received his Bachelor's Degree from Cornell University in 1970 and his Sc.D. from the Massachusetts Institute of Technology in 1974, both in Chemical Engineering. He served as a member of the United States Food and Drug Administration's SCIENCE Board from 1995 – 2002 and as its Chairman from 1999-2002. Dr. Langer has received over 180 major awards including the 2006 United States National Medal of Science; the Charles Stark Draper Prize and the 2008 Millennium Prize. In 1989, Dr. Langer was elected to the Institute of Medicine of the National Academy of Sciences, and in 1992 he was elected to both the National Academy of Engineering and to the National Academy of Sciences. Dr. Langer has received honorary doctorates from 16 national and international universities.

Dr. Reggie Edgerton, PhD, Scientific Advisory Board Member, has been the Director of U.C.L.A.'s Edgerton Lab since 1968 and is a professor in the Department of Physiological Sciences at U.C.L.A. His research is focused on neural control of movement and how this neural control adapts to altered use and after spinal cord injury. He completed his Ph.D. under the direction of Drs. Wayne Van Huss, Rex Carrow, and William Heusner at Michigan State University. Dr. Edgerton is on the Scientific Advisory Board of The Christopher Reeves Foundation (CRF) and his laboratory is one of eight in the world receiving funding from the CRF. In addition to serving on the board of the CRF, he is currently on the Scientific Advising board of the American Paralysis Association. Dr. Edgerton has co-authored two books and is the author of approximately 300 research papers.

Jonathan Slotkin, MD, Scientific Advisory Board Member, is a clinical neurosurgeon and research scientist. Clinically, Dr. Slotkin has expertise in complex spinal surgery, minimally invasive spinal surgery, spinal oncology surgery and brain tumor surgery. Dr. Slotkin completed residency training in neurosurgery at Harvard Medical School, Brigham and Women's Hospital. He performed a fellowship in complex spinal surgery with Dr. Eric J. Woodard. He is the co-editor of a two-volume publication on spinal surgery. Dr. Slotkin is currently a neurosurgeon with the Washington Brain and Spine Institute. Dr. Slotkin has authored or co-authored several peer-reviewed scientific publications in the areas of repair after spinal cord injury in animal models, and in vivo quantum dot labeling of neural stem cells.

Todd J. Albert, MD, Scientific Advisory Board Member, is the James Edwards Professor and Chair of the Department of Orthopaedics at Jefferson Medical College. He is also the President of the Rothman Institute in Philadelphia. Previously, he served as Co-director of Reconstructive Spine Surgery and the Spine Fellowship Program at Thomas Jefferson University. Dr. Albert graduated magna cum laude from Amherst College and received his doctor of medicine degree from the University of Virginia School of Medicine. Dr. Albert serves on the boards of several scientific journals, including Spine, The Spine Journal, and The Journal of Spinal Disorders and Techniques, as well as medical associations. He is Chair of Network Development for the National Spine Network . Dr. Albert has published over 200 scientific articles, authored over 40 book chapters, and seven textbooks on spinal surgery.

David W. Feigal Jr., MD, Business Advisory Board Member, recently served as Vice President, Global Regulatory at Amgen, Inc. Previously, Dr. Feigal was Senior Vice President, Head of Global Regulatory and Global Safety Surveillance at Elan. Prior to joining Elan in November 2006, he spent 12 years with the FDA. During his time at the FDA, he was Head of the Center for Devices and Head of the Center for Biologics for five years each. Before joining the FDA, Dr. Feigal worked for 10 years within the academic and hospital settings of the University of California in San Diego, San Francisco and Davis. He holds a BA from University of Minnesota, an MD from Stanford University and a Master of Public Health from the University of California, Berkeley.

PROPOSAL NO. 2

APPROVAL OF AN AMENDMENT TO OUR 2010 EQUITY INCENTIVE PLAN INCREASING THE NUMBER OF SHARES AVAILABLE FOR ISSUANCE UNDER THE PLAN FROM 3,500,000 TO 6,500,000

Our Board of Directors has adopted and is seeking shareholder approval of an amendment to our 2010 Equity Incentive Plan (the “Plan”) to increase the number of shares of our common stock that are available to be issued through grants or awards made under the Plan or through the exercise of options granted under the Plan from 3,500,000 shares to 6,500,000. Of the 3,500,000 shares of common stock currently authorized for issuance in connection with grants made under the Plan, 65,111 shares remain available for future grants or awards as of April 15, 2012. While some additional shares may become available under the plan through employee terminations, this number is expected to be inconsequential.

The Plan provides equity compensation to our officers, directors, employees and consultants and is necessary in order to maintain competitive compensation practices and to align the interests of our officers, directors, employees and consultants with our shareholders, in accordance with our executive compensation philosophy. Our Board of Directors recommends the increase in shares available under the Plan in order to enable us to continue to provide a source of equity to attract, motivate, retain and reward high-quality executives and other employees, officers, directors and consultants. Our Board of Directors believes that equity-based compensation promotes growth and provides a meaningful incentive to personnel of successful companies.

The increase of 3,000,000 shares of our common stock available for grant under the Plan will result in additional potential dilution of our outstanding stock. Based solely on the last reported sale price of our common stock as quoted on the OTC Bulletin Board on April 13, 2012 of \$2.36 per share, the maximum aggregate market value of the additional 3,000,000 shares of our common stock to be reserved for issuance under the plan would be \$7,080,000.

Shareholder approval of the amendment to the plan is required (i) to comply with certain exclusions from the limitations of Section 162(m) of the Internal Revenue Code of 1986, as amended, which we refer to as the Code, as described below, (ii) to comply with the incentive stock options rules under Section 422 of the Code, and (iii) should we seek listing on a national securities exchange, for purposes of complying with the shareholder approval requirements for the listing of such shares.

The Board of Directors recommends a vote FOR the adoption of the amendment to our 2010 Equity Incentive Plan.

The following is a summary of certain principal features of the plan, reflecting the proposed amendment. This summary is qualified in its entirety by reference to the complete text of the plan. Shareholders are urged to read the actual text of the plan in its entirety which is set forth as Appendix A to this proxy statement.

Summary of 2010 Equity Incentive Plan

The Plan provides for the grant of incentive stock options, or ISOs, as defined in Section 422 of the Code, non-statutory stock options, restricted stock, restricted stock units, stock appreciation rights, or SARs, performance units, performance shares and other stock or cash awards as the administrator of the Plan may determine, which we refer to collectively as “Awards, to our directors, officers, employees and consultants.

Shares Subject to the Plan

Under the Plan, the aggregate number of shares of our common stock that may be granted, assuming approval of this Proposal No. 2, is 6,500,000 shares. Under the Plan, no more than 2,000,000 shares may be granted as Awards to any one individual during any calendar year. The maximum aggregate amount of cash that may be paid in cash during any calendar year with respect to one or more Awards payable in cash is \$2,000,000.

The shares subject to the Plan, the limitations on the number of shares that may be awarded under the Plan, and shares and option prices subject to Awards outstanding under the Plan, will be adjusted as the Plan administrator deems appropriate to reflect stock dividends, stock splits, combinations or exchanges of shares, merger, consolidation, spin-off, recapitalization, or other similar transactions.

Shares subject to Awards under the Plan that have expired, been forfeited or settled in cash, or otherwise terminated without having been exercised may be added back to the Plan and may be granted as new Awards. Shares used to pay the tax or exercise price of an Award will become available for future grant or sale under the Plan. Shares granted under the Plan may be previously authorized but unissued shares, treasury shares or shares bought on the open market or otherwise.

Administration; Amendments

Generally, our Governance, Nominating and Compensation Committee, or GNC Committee, will administer the Plan. The GNC Committee has the authority to:

- select the individuals who will receive Awards;
- determine the terms and conditions of any Award, including the exercise price and vesting (including acceleration thereof);
- modify and amend the terms of any Award
- prescribe, amend or rescind rules relating to the administration of the Plan;
- interpret the terms of the Plan and any Award, and any matters arising under the Plan; and
- make all other determinations as may be necessary or advisable to administer the Plan.

The GNC Committee or the Board may also amend the Plan. Amendments to the Plan are subject to shareholder approval to the extent required by law. No change may be made that increases the total number of shares of our common stock reserved for issuance pursuant to incentive awards or reduces the minimum exercise price for options or exchange of options for other incentive awards, unless such change is authorized by our shareholders within one year.

Eligibility

Awards under the Plan may be granted to individuals who are our directors or employees or consultants of our company or any of our subsidiaries. However, options which are intended to qualify as ISOs may only be granted to our employees and employees of our subsidiaries.

Awards

The following will briefly describe the principal features of the various Awards that may be granted under the Plan.

Options. Options provide for the right to purchase shares of our common stock at a specified price, and usually will become exercisable in the discretion of the GNC Committee in one or more installments after the grant date. The GNC Committee will determine the acceptable forms of consideration for exercising an option, including the method of payment, to the extent permitted by applicable law.

Options may be granted for any term specified by the GNC Committee, but shall not exceed ten years. Options may not be granted at an exercise price that is less than the fair market value of our common stock on the date of grant. For purposes of the Plan, fair market value is defined as the closing price for our common stock on any established stock exchange or on a national market system on the day of determination, if our common stock is so listed. If our common stock is not listed, the value of the common stock will be determined as the GNC Committee may determine in good faith.

Options may take two forms, nonstatutory options, or NSOs, and ISOs. ISOs will be designed to comply with the provisions of the Code and will be subject to certain restrictions contained in the Code in order to qualify as ISOs. Among such restrictions, ISOs must:

- have an exercise price not less than the fair market value of our common stock on the date of grant, or if granted to certain individuals who own or are deemed to own at least 10% of the total combined voting power of all of our classes of stock (“10% shareholders”), then such exercise price may not be less than 110% of the fair market value of our common stock on the date of grant;
- be granted only to our employees and employees of our subsidiary entities;
- expire within a specified time following the option holder’s termination of employment;
- be exercised within ten years after the date of grant, or with respect to 10% shareholders, no more than five years after the date of grant; and
- not be first exercisable for more than \$100,000 worth of value, determined based on the exercise price.

If an Award purported to be an ISO fails to meet the requirements of the Code, then the Award will instead be considered a NSO.

Stock Appreciation Rights. SARs provide for the payment to the holder based upon increases in the price of our common stock over a set base price, which may not be less than the fair market value of our common stock on the date of grant. Payment for SARs may be made in cash, common stock or any combination of the two. SARs may be granted for any term specified by the GNC Committee, but shall not exceed ten years.

Restricted Stock. A restricted stock award is the grant of shares of our common stock at a price determined by the GNC Committee (which price may be zero), is nontransferable and unless otherwise determined by the GNC Committee at the time of award, may be forfeited upon termination of employment or service during a restricted period. The GNC Committee may restrict the participant’s ability to vote the shares of restricted stock or receive dividends on such shares.

Restricted Stock Units. Restricted stock units represent the right to receive shares of our common stock at a specified date in the future, subject to forfeiture of such right. If the restricted stock unit has not been forfeited, then on the date specified in the restricted stock unit agreement we shall deliver to the holder of the restricted stock unit, unrestricted shares of common stock which will be freely transferable. The GNC Committee will specify the purchase price, if any, to be paid by the grantee for the common stock.

Performance Share Awards. Performance share awards are denominated in shares of our common stock and are linked to satisfaction of performance criteria established by the GNC Committee. If the GNC Committee determines that the Award is intended to meet the requirements of “performance-based compensation” and therefore be deductible under Section 162(m) of the Code, then the performance criteria on which the Award will be based shall be with reference to any one or more of the following: earnings per share, operating cash flow, operating income, profit after-tax, profit before-tax, return on assets, return on equity, return on sales, revenue, total shareholder return and such other objective goals established by the GNC Committee any of which may be measured either in absolute terms or as compared to any incremental increase or decrease or as compared to results of a peer group or to market performance indicators (the “Performance Criteria”).

Performance Units. Performance units are denominated in units equivalent to shares of our common stock or units of value, including dollar value of shares of common stock, and are linked to satisfaction of performance criteria established by the GNC Committee, including the Performance Criteria, on a specified date or dates over any period or periods.

Adjustments; Effect of a Change in Control

The Administrator is authorized to adjust outstanding Awards in the event that a dividend or other distribution (whether in the form of cash, shares, other securities or other property), recapitalization, stock split,

reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase or exchange of shares or other corporate event that affects shares of our common stock so that an adjustment is appropriate. These adjustments include changing the number and type of shares to be issued under the Plan, changing per-person limitations on Awards, and the grant, purchase or exercise price of an Award.

In the event of a change in control (as defined in the Plan set forth in [Appendix A](#) to this Proxy Statement), Awards granted under the Plan will be treated as the GNC Committee determines, including, without limitation, that each Award will fully vest, be assumed or an equivalent award will be substituted by a successor in such change in control. In the event that the successor does not assume or substitute for the Award, the participant will fully vest in and have the right to exercise all of his or her outstanding options and SARs, including shares as to which such Awards would not otherwise be vested or exercisable, all restrictions on restricted stock will lapse, and, with respect to restricted stock units, performance shares and performance units, all performance goals or other vesting criteria will be deemed achieved at target levels and all other terms and conditions met.

Awards Not Transferable

Generally, the Awards may not be pledged, assigned or otherwise transferred other than by will or by laws of descent and distribution. If the GNC Committee makes an Award transferable, such Award may only be transferred (i) by will, (ii) by the laws of descent and distribution, (iii) to a revocable trust, or (iv) as permitted by Rule 701 of the Securities Act of 1933, as amended (the “Securities Act”).

Section 162(m)

Under Code Section 162(m), in general, income tax deductions of publicly-traded companies may be limited to the extent total compensation (including base salary, annual bonus, stock option exercises) for certain executive officers exceeds \$1 million in any one taxable year. However, under Code Section 162(m), the deduction limit does not apply to certain “performance-based” compensation established by an independent compensation committee which conforms to certain restrictive conditions stated under the Code and related regulations. The Plan has been structured with the intent that Awards granted under the Plan may meet the requirements for “performance-based” compensation and Code Section 162(m). To the extent granted at an exercise price not less than the value of our common stock, options and SARs granted under the Plan are intended to qualify as “performance-based” under Section 162(m) of the Code. Restricted stock, performance stock awards, performance units and restricted stock units under the Plan may qualify as “performance-based” under Code Section 162(m) if they vest or become payable based solely upon attainment of pre-established goals based on the Performance Criteria. Performance Awards may qualify as “performance-based” under Code Section 162(m) to the extent payable based solely on attainment of pre-established goals based on the Performance Criteria. We have attempted to structure the Plan in such a manner that the GNC Committee can determine the terms and conditions of Awards granted thereunder in order to determine whether the remuneration attributable to such Awards will be subject to the \$1 million limitation. We have not, however, requested a ruling from the IRS or an opinion of counsel regarding this issue. This discussion will neither bind the IRS nor preclude the IRS from taking a contrary position with respect to the Plan.

Miscellaneous

As a condition to the issuance or delivery of stock or payment of other compensation pursuant to the exercise or lapse of restrictions on any Award, we require participants to discharge all applicable withholding tax obligations. The Plan will expire and no further Awards may be granted under the Plan after the tenth anniversary of its adoption by the Board of Directors, unless terminated earlier by the Board of Directors in accordance with the terms of the Plan.

Certain U.S. Federal Income Tax Consequences

The U.S. Federal income tax consequences of the Plan under current U.S. Federal income tax law are summarized in the following discussion which deals with the general tax principles applicable to the Plan, and is

intended for general information only. In addition, the tax consequences described below are subject to the limitations of Code Section 162(m), as discussed in further detail below. Alternative minimum tax and other Federal taxes and foreign, state and local income taxes are not discussed, and may vary depending on individual circumstances and from locality to locality.

Nonqualified Stock Options. For Federal income tax purposes, the recipient of NSOs granted under the Plan will not have taxable income upon the grant of the option, nor will we then be entitled to any deduction. Generally, upon exercise of NSOs the optionee will realize ordinary income, and we will be entitled to a deduction, in an amount equal to the difference between the option exercise price and the fair market value of the stock at the date of exercise.

Incentive Stock Options. An optionee generally will not recognize taxable income upon either the grant or exercise of an ISO. However, the amount by which the fair market value of the shares at the time of exercise exceeds the exercise price will be an “item of tax preference” for the optionee. Generally, upon the sale or other taxable disposition of the shares of common stock acquired upon exercise of an ISO, the optionee will recognize income taxable as capital gains in an amount equal to the excess, if any, of the amount realized in such disposition over the option exercise price, provided that no disposition of the shares has taken place within either (a) two years from the date of grant of the ISO or (b) one year from the date of exercise. If the shares of common stock are sold or otherwise disposed of before the end of the one-year and two-year periods specified above, the difference between the Award exercise price and the fair market value of the shares on the date of exercise generally will be taxable as ordinary income; the balance of the amount realized from such disposition, if any, generally will be taxed as capital gain. If the shares of common stock are disposed of before the expiration of the one-year and two-year periods and the amount realized is less than the fair market value of the shares at the date of exercise, the optionee’s ordinary income generally is limited to the excess, if any, of the amount realized in such disposition over the option exercise price paid. Our company (or other employer corporation) generally will be entitled to a tax deduction only to the extent the optionee has ordinary income upon sale or other disposition of the shares of common stock.

Restricted Stock. Generally, a participant will not be taxed upon the grant or purchase of restricted stock that is subject to a “substantial risk of forfeiture,” within the meaning of Section 83 of the Code, until such time as the restricted stock is no longer subject to the substantial risk of forfeiture. At that time, the participant will be taxed on the difference between the fair market value of the common stock and the amount the participant paid, if any, for such restricted stock. However, the recipient of restricted stock under the Plan may make an election under Section 83(b) of the Code to be taxed with respect to the restricted stock as of the date of transfer of the restricted stock rather than the date or dates upon which the restricted stock is no longer subject to a substantial risk of forfeiture.

Stock Appreciation Rights. No taxable income is generally recognized upon the receipt of a SAR. Upon exercise of a SAR, the cash or the fair market value of the shares received generally will be taxable as ordinary income in the year of such exercise. We generally will be entitled to a compensation deduction for the same amount which the recipient recognizes as ordinary income.

Restricted Stock Units. A participant will generally not recognize taxable income upon grant of a restricted stock unit. However, when the shares are delivered to the participant, then the value of such shares at that time will be taxable to the participant as ordinary income. Generally, we will be entitled to a deduction for an amount equal to the amount of ordinary income recognized by the participant.

Performance Share Awards and Performance Units. A participant will recognize taxable ordinary income on the fair market value of the shares or the cash paid on performance share awards and performance units when such Awards are delivered or paid and generally we will be entitled to a corresponding deduction.

Code Section 409A. Certain Awards under the Plan, depending in part on particular Award terms and conditions, may be considered non-qualified deferred compensation subject to the requirements of Code

Section 409A. If the terms of such Awards do not meet the requirements of Code Section 409A, then the violation may result in an additional 20% tax obligation, plus penalties and interest for such participant.

Importance of Consulting Tax Adviser

The information set forth above is a summary only and does not purport to be complete. In addition, the information is based upon current Federal income tax rules and therefore is subject to change when those rules change. Moreover, because the tax consequences to any recipient may depend on his particular situation, each recipient should consult his or her tax adviser as to the Federal, state, local and other tax consequences of the grant or exercise of an Award or the disposition of stock acquired as a result of an Award.

Plan Benefits

No grants have been made with respect to additional shares of our common stock to be reserved for issuance under the plan. In addition, the number of shares of our common stock that may be granted to officers, directors, employees and consultants is indeterminable at this time, as those grants generally are subject to the discretion of the GNC Committee.

Equity Compensation Plan Information

The following table provides certain information as of December 31, 2011 about shares of our common stock that may be issued under our equity compensation plans:

	(a)	(b)	(c)
Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))(1)
Equity compensation plans approved by security holders	6,302,893	\$ 0.76	1,492,112
Equity compensation plans not approved by security holders	—	—	—
Total	6,302,893	\$ 0.76	1,492,112

(1) This table excludes the additional 3,000,000 shares that would be available for issuance under the 2010 Plan if Proposal No. 2 is approved by shareholders at the Annual Meeting.

PROPOSAL NO. 3

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

The audit committee of our Board of Directors (the “Audit Committee”) has again selected Wolf & Company, P.C. as our independent registered public accounting firm to audit our financial statements for the fiscal year ending December 31, 2012. The Board of Directors is asking our shareholders to ratify the appointment of Wolf & Company, P.C. as our independent registered public accounting firm. If the shareholders do not ratify the selection of Wolf & Company, P.C. as our independent registered public accounting firm, the Audit Committee will reconsider its selection. Even if the appointment is ratified, the Audit Committee, in its discretion, may direct the appointment of a different independent registered public accounting firm at any time during the year if the Audit Committee determines that such a change would be in our and our shareholders’ best interests. A representative of Wolf & Company, P.C. is expected to be present at the Annual Meeting and will have the opportunity to make a statement if he or she desires to do so and will be available to respond to appropriate questions from shareholders.

On October 29, 2010, we engaged Wolf & Company, P.C. as our independent registered public accounting firm, and effective October 29, 2010, we dismissed Sherb & Co., LLP, as our independent registered public accounting firm. The decision to dismiss Sherb & Co., LLP and to appoint Wolf & Company, P.C. was approved by our Board of Directors. Sherb & Co., LLP’s report on our financial statements for either of the two most recent fiscal years prior to their dismissal did not contain an adverse opinion or disclaimer of opinion, or qualification or modification as to uncertainty, audit scope, or accounting principles, except that such report on our financial statements contained an explanatory paragraph in respect to the substantial doubt about our ability to continue as a going concern.

During our two most recent fiscal years prior to Sherb & Co., LLP’s dismissal and in the subsequent interim period through the date of dismissal, there were no disagreements, resolved or not, with Sherb & Co., LLP on any matter of accounting principles or practices, financial statement disclosure, or audit scope and procedures, which disagreement(s), if not resolved to the satisfaction of Sherb & Co., LLP, would have caused Sherb & Co., LLP to make reference to the subject matter of the disagreement(s) in connection with its report. During our two most recent fiscal years prior to Sherb & Co., LLP’s dismissal and in the subsequent interim period through the date of dismissal, there were no reportable events as described in Item 304(a)(1)(v) of Regulation S-K.

On November 1, 2010, we filed a Current Report on Form 8-K with the SEC reporting the events described above. Attached as an exhibit to the Current Report on Form 8-K is a letter from Sherb & Co., LLP indicating that we provided Sherb & Co., LLP with a copy of the foregoing disclosure and stating that it agreed with the statements contained in the disclosure, except with respect to certain statements with respect to which it had no basis on which to agree or disagree.

During our two most recent fiscal years prior to Sherb & Co., LLP’s dismissal and in the subsequent interim period through the date of appointment, we did not consult with Wolf & Company, P.C. regarding either the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on our financial statements, nor did Wolf & Company, P.C. provide to us a written report or oral advice that Wolf & Company, P.C. concluded was an important factor considered by us in reaching a decision as to the accounting, auditing or financial reporting issue. In addition, during such periods, we did not consult with Wolf & Company, P.C. regarding any matter that was either the subject of a disagreement (as defined in Item 304(a)(1)(iv) and the related instructions) or a reportable event (as described in Item 304(a)(1)(v) of Regulation S-K).

The Board of Directors recommends a vote FOR the ratification of the selection of Wolf & Company, P.C. as our independent registered public accounting firm for the fiscal year ending December 31, 2012.

Independent Registered Public Accounting Firm Fees

Audit Fees

2011 Audit Fees: The aggregate audit fees billed by Wolf & Company, P.C. in 2011 was \$55,500. Audit fees consist of fees incurred for professional services rendered for the audit of consolidated financial statements and for reviews of our interim consolidated financial statements included in our quarterly reports on Form 10-Q.

2010 Audit Fees: The aggregate audit fees billed by Wolf & Company, P.C. in 2010 was \$49,500. The aggregate audit fees billed by Sherb & Co., LLP in 2010 was \$19,500. Audit fees consist of fees incurred for professional services rendered for the audit of consolidated financial statements, for reviews of our interim consolidated financial statements included in our quarterly reports on Form 10-Q and for services that are normally provided in connection with statutory or regulatory filings or engagements.

Audit Related Fees:

2011 Audit Related Fees: The aggregate audit related fees billed by Wolf & Company, P.C. in 2011 was \$50,250 related to assistance in amending the consolidated financial statements for the year ended December 31, 2010, assistance with responses to comments of the Staff of the Securities and Exchange Commission, and review of financial information and consents in conjunction with Form 8-K, Form S-8 and Form S-1 filings.

2010 Audit Related Fees. The aggregate audit related fees billed by Wolf & Company, P.C. in 2010 was \$8,500 related to review of financial information and consent in conjunction with Form 8-K and Form S-1 filings. Sherb & Co., LLP did not bill our company for any audit related services in addition to the fees reported under “2010 Audit Fees” above.

Tax Fees:

2011 Tax Fees: Wolf & Company, P.C. did not bill our company for any tax related services in 2011.

2010 Tax Fees: Wolf & Company, P.C. and Sherb & Co., LLP did not bill our company for any tax related services in 2010.

All Other Fees:

2011 Other Fees: There were no other fees paid to Wolf & Company, P.C. in 2011.

2010 Other Fees: There were no other fees paid to Wolf & Company, P.C. or Sherb & Co., LLP in 2010.

Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Registered Public Accounting Firm

Prior to the establishment of our Audit Committee, the Board of Directors pre-approved all services provided by our independent registered public accounting firm. Our Audit Committee is now responsible for pre-approving all services provided by our independent registered public accounting firm. All of the above services and fees were reviewed and approved by the Board of Directors or the Audit Committee, as applicable, before the services were rendered. The Audit Committee has considered the nature and amount of fees billed by Wolf & Company, P.C. and believes that the provision of services for activities unrelated to the audit is compatible with maintaining Wolf & Company, P.C.’s independence.

Audit Committee Financial Expert

The Board has determined that George Nolen is an “audit committee financial expert” (as defined in Item 407(d)(5) of Regulation S-K). Mr. Nolen is independent as defined in applicable SEC rules.

AUDIT COMMITTEE REPORT

The Audit Committee of the Board of Directors has reviewed and discussed our audited financial statements for fiscal 2011 with our management. The Audit Committee has discussed with Wolf & Company, P.C., our independent registered public accounting firm, the matters required to be discussed by the Statement on Auditing Standards No. 61, as adopted by the Public Company Accounting Oversight Board, or PCAOB, in Rule 3200T. The Audit Committee has received the written disclosures and the letter from Wolf & Company, P.C. required by the applicable requirements of the PCAOB regarding the independent accountant's communications with the Audit Committee concerning independence, and has discussed with Wolf & Company, P.C. its independence. The Audit Committee also considered whether Wolf & Company, P.C.'s provision of non-audit services to our company is compatible with maintaining Wolf & Company, P.C.'s independence. Based on the review and discussions described above, among other things, the Audit Committee recommended to the Board that the audited financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2011.

AUDIT COMMITTEE

George Nolen, Chairman
Christi Pedra
Dr. Richard J. Roberts

The information contained in the foregoing report shall not be deemed to be "soliciting material" or "filed" or incorporated by reference into any of our previous or future filings with the SEC, or subject to the liabilities of Section 18 of the Exchange Act, except to the extent specifically incorporated by reference into a document filed under the Securities Act or the Exchange Act.

MANAGEMENT

Executive Officers

Frank M. Reynolds is our Chief Executive Officer, President and Chief Financial Officer. Mr. Reynolds will serve as Chief Financial Officer pending our hiring of an individual to serve in such capacity. We have initiated a search to locate such a qualified individual. Please see “Election of Class I Director” above for biographical information regarding Mr. Reynolds.

Dr. Edward D. Wirth III, 47, our Chief Science Officer, joined our company in December 2011. Prior to joining our company, Dr. Wirth was the Medical Director, Regenerative Medicine at Geron Corporation which he joined in August 2004 and where he led the team at Geron Corporation that initiated and conducted the first-ever clinical trial of human embryonic stem cell-derived oligodendrocyte progenitor cells (GRNOPC1) in patients with subacute spinal cord injuries. From January 2002 to May 2004, Dr. Wirth held academic appointments at Rush-Presbyterian St. Luke’s Medical Center and at the University of Chicago. From July 1997 to December 2001, Dr. Wirth led the University of Florida team that performed the first human embryonic spinal cord transplant in the United States.

EXECUTIVE COMPENSATION

Set forth below is information regarding the compensation of our Chief Executive Officer and our other most highly compensated executive officer for the year ended December 31, 2011 who was serving as an executive officer as of the end of fiscal 2011. Such officers are collectively referred to as the “named executive officers.”

Summary Compensation Table

The following table sets forth information regarding the named executive officers’ compensation for fiscal years 2011 and 2010.

Summary Compensation Table

Name and Principal Position	Fiscal Year	Salary	Bonus	Option/SAR Awards(1)	All Other Compensation	Total
Frank Reynolds Chief Executive Officer, President and Chief Financial Officer(2)	2011	\$ 477,000	\$ 230,000	\$ 149,500	\$ 240,991(3)	\$ 1,097,491
	2010	\$ 375,000	\$ 150,000	—	\$ 52,568(4)	\$ 577,568
Edward Wirth, M.D., PhD Chief Science Officer(5)	2011	\$ 10,654	\$ 37,000	\$ 975,493	—	\$ 1,023,147

- (1) The amounts shown in this column represent the aggregate grant date fair value of awards computed in accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification Topic 718, not the actual amounts paid to or realized by the named executive officer during fiscal 2011 or 2010. The assumptions used in determining grant date fair value of these awards are set forth in Note 14 to our Consolidated Financial Statements appearing in our Annual Report on 10-K filed with the SEC for the period ended December 31, 2011.
- (2) In October 2010, we completed a reverse merger between our company and InVivo Therapeutics Corporation, or ITC. Mr. Reynolds previously served as Chief Executive Officer of ITC and became our Chief Executive Officer upon consummation of the merger. The amounts reflected in the table for 2010 includes compensation paid to Mr. Reynolds for services rendered to ITC and our company.

- (3) Represents (i) a payment in 2012 of \$128,423 for vacation accrued in 2011, (ii) a payment in 2012 of \$50,000 for services rendered as Chief Financial Officer in 2011; (iii) \$41,600 in living expenses; (iv) \$9,900 in auto allowance; (v) \$10,000 for a professional membership; and (vi) \$1,068 for life insurance premiums.
- (4) Represents (i) \$41,600 in living expenses; (ii) \$9,900 in auto allowance; and (iii) \$1,068 for life insurance premiums.
- (5) Dr. Wirth joined our company in December 2011 and receives an annual salary of \$277,000.

Agreements with Executive Officers

Frank M. Reynolds. We entered into an amended and restated executive employment agreement with Frank Reynolds, our Chief Executive Officer and Chief Financial Officer, on March 05, 2012. The agreement established Mr. Reynolds' compensation as follows: (i) an annual base salary of \$545,000; (ii) an annual bonus, with a 2012 target of \$260,000, which is subject to the achievement of performance targets approved by the GNC Committee under the Annual Cash Bonus Plan for Executive Officers (as described below); (iii) a one-time cash bonus of \$100,000 as consideration for Mr. Reynolds' service as Chief Financial Officer and efforts to find and appoint a new Chief Financial Officer; (iv) \$6,000 per month for housing and living expenses in Massachusetts for so long as he maintains his primary residence outside of Massachusetts, subject to a tax gross up; and (v) other annual fringe benefits in the amount of \$20,200 per year, subject to a tax gross up. The agreement also provides that the Company will pay Mr. Reynolds \$128,423 for all accrued but unused vacation as of December 31, 2011 (which had accrued over multiple years). Mr. Reynolds was also granted an option to purchase 590,000 shares of our common stock under the Company's 2010 Equity Incentive Plan at an exercise price of \$2.68 per share, which vests and becomes exercisable in equal monthly installments over the course of the four-year period beginning on January 1, 2012. The agreement also contains various restrictive covenants, including covenants relating to non-competition, non-solicitation, confidentiality and cooperation.

Edward Wirth, M.D. We entered into an employment offer letter on September 24, 2011 with Dr. Wirth that provided for the terms of his employment beginning on December 5, 2011. The offer letter provides that Dr. Wirth will receive an annual salary of \$277,000 and will be eligible for an annual bonus, with a target bonus equal to 20% of his annual salary, after one year of employment. Upon commencement of employment, Dr. Wirth was granted an option to purchase 775,000 shares of the Company's common stock, vesting as to 25% of the shares subject to the option on each of the first, second, third and fourth anniversaries of the date of grant, provided that Dr. Wirth remains employed by the Company on each vesting date. In addition, Dr. Wirth received a \$37,000 sign-on bonus, which was payable after 30 days of employment.

Potential Payments upon Termination or Change-in-Control

Under his employment agreement, if Mr. Reynolds' employment is terminated by us without cause, or by Mr. Reynolds as a result of a constructive termination by us, or as a result of Mr. Reynolds' death or disability, then we are obligated to pay severance (consisting of base salary in effect at the time of termination) to Mr. Reynolds (or Mr. Reynolds' legal representatives) for a period of 18 months. In addition, if Mr. Reynolds' employment is terminated by us without cause, or by Mr. Reynolds as a result of a constructive termination by us, we will be obligated to pay Mr. Reynolds his target bonus, prorated based on the number of days of such fiscal year that have elapsed as of the termination date, as well as up to 18 months of health insurance benefits, and all unvested equity awards will vest. Severance payments are contingent on execution of a general waiver and release of claims against us and certain of our affiliates, and are in addition to accrued obligations to Mr. Reynolds unpaid by us prior to the time of termination, death or disability.

Annual Cash Bonus Plan for Executive Officers

On March 4, 2012, the Compensation Committee of the Board of Directors adopted the Annual Cash Bonus Plan for Executive Officers as a means of providing performance-based incentives that motivate and reward superior managerial performance. Eligible participants are our company's executive officers. As of the effective date of the plan, the sole participant is our President and Chief Executive Officer.

The plan outlines general performance goals and business criteria upon which each participant’s performance will be evaluated. The target bonus and the specific performance goals and business criteria with respect to a particular plan year will be approved each year by the Compensation Committee. Performance will be measured against these specific performance goals and business criteria. Generally, performance will be evaluated based on financial and operational performance goals and business criteria. Financial performance goals and business criteria include, without limitation, targets tied to capital raising, stock price, trading volume, research coverage and institutional ownership. Operational performance goals and business criteria include, without limitation, targets tied to regulatory filings and approvals, pre-clinical and clinical trials and related results, publications, intellectual property, joint ventures and joint developments, product development, and manufacturing capabilities. The Compensation Committee also has discretion to grant bonuses in excess of the bonus calculated based on the level of achievement and in excess of the target bonus if it determines that such bonuses are warranted under the circumstances and are in the best interests of our company and our stockholders.

Outstanding Equity Awards at 2011 Fiscal Year-End

The following table summarizes the equity awards made to our named executive officers that were outstanding at December 31, 2011. Each option award reflected in the below table vests as follows: 25% of the shares vest on the first, second, third and fourth anniversaries of the date of grant.

Name	Award Grant Date	No. of Securities Underlying Unexercised Options (#) Exercisable	No. of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price	Option Expiration Date
Frank Reynolds	12/12/2009	392,462	392,462	\$ 0.91	12/12/2019
	03/15/2011	62,500	187,500	\$ 1.20	03/15/2021
Edward Wirth, M.D., Ph.D.	12/05/2011	—	775,000	\$ 1.87	12/05/2021

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Related Party Transaction Policy

The Audit Committee reviews and oversees all related party transactions on an ongoing basis. A “related-party transaction” is a transaction that meets the minimum threshold for disclosure in the proxy statement under applicable SEC rules (generally, transactions involving amounts exceeding the lesser of \$120,000 or one percent of the average of a company’s total assets at year end for the last two completed fiscal years in which a “related person” or entity has a direct or indirect material interest). “Related persons” include a company’s executive officers, directors, beneficial owners of 5% or more our common Stock, immediate family members of these persons and entities in which one of these persons has a direct or indirect material interest. When a potential related-party transaction is identified, management presents it to the Audit Committee to determine whether to approve or ratify it.

The Audit Committee reviews the material facts of any related-party transaction and either approves or disapproves of entering into the transaction. In the course of reviewing the related-party transaction, the Audit Committee considers whether (i) the transaction is fair and reasonable to our company, (ii) under all of the circumstances the transaction is in, or not inconsistent with, our company’s best interests, and (iii) the transaction will be on terms no less favorable to our company than we could have obtained in an arms’-length transaction with an unrelated third party. If advance approval of a related-party transaction is not feasible, then the transaction will be considered and, if the Audit Committee determines it to be appropriate, ratified by the Audit Committee. No director may participate in the approval of a transaction for which he or she is a related party.

When a related-party transaction is ongoing, any amendments or changes are reviewed and the transaction is reviewed annually for reasonableness and fairness to our company.

Transactions with Spencer Trask and its Related Parties

In October 2010, we engaged in a reverse merger transaction with InVivo Therapeutics Corporation, or ITC, a privately held Delaware corporation, pursuant to which ITC became our wholly-owned subsidiary and the business of ITC became our business. Prior to the consummation of the merger, Spencer Trask Ventures acted as finder to ITC in connection with the sale of \$500,000 of principal amount of bridge notes and an aggregate of 500,000 warrants in September 2010. Spencer Trask received 100,000 warrants (which are identical to the warrants issued to investors) as compensation for acting as a finder in the bridge financing, and affiliates of Spencer Trask purchased \$150,000 of bridge notes in the bridge financing.

In September 2010, several related parties to Spencer Trask purchased an aggregate of 3,895,643 shares of our common stock in private transactions from various shareholders. The aggregate purchase price paid to such shareholders by the related parties for such shares was approximately \$49,000. Adam K. Stern, Senior Managing Director of Spencer Trask and its designee to serve on our Board of Directors, along with certain entities in which Mr. Stern is the beneficial owner, owns 1,948,322 of these shares. In addition, Optical Partners, an entity beneficially owned by Kevin Kimberlin, the Chairman of Spencer Trask & Co., Inc., the parent corporation of Spencer Trask owns 1,947,321 of these shares.

In connection with the reverse merger, we also engaged in a private placement of our securities for which Spencer Trask acted as our exclusive placement agent. For its services, we paid Spencer Trask (i) a cash fee equal to 10% of the gross proceeds raised in our private placement (\$1,300,000) and (ii) a non-accountable expense allowance equal to 3% of the gross proceeds raised in our private placement (\$390,000). In addition, we granted to Spencer Trask or its designees, for nominal consideration, five-year warrants to purchase (i) 2,600,000 shares of our common stock at an exercise price of \$1.00 per share and (ii) 2,600,000 shares of our common stock at an exercise price of \$1.40 per share.

We have agreed to engage Spencer Trask as our warrant solicitation agent in the event we elect to call the warrants issued in the private placement for redemption and in such case shall pay a warrant solicitation fee to Spencer Trask equal to five (5%) percent of the amount of funds solicited by Spencer Trask upon the exercise of the warrants following such redemption.

Spencer Trask was granted the right to designate one member to our Board of Directors for a period of two years following the closing of the private placement and has designated Adam K. Stern to fill such Board seat.

We have also agreed to pay Spencer Trask compensation of \$5,000 per month for a period of two years for services relating to strategies to maximize shareholder value; and we have entered into a non-exclusive finder's fee agreement with Spencer Trask providing that if Spencer Trask shall introduce us to a third party that consummates certain investment or business combination transactions with us during the 18 month period following the final closing of the private placement, Spencer Trask will be paid a finder's fee, payable in cash at the closing of such transaction, equal to 7% of the first \$1 million of consideration paid by or to us, plus 6% of the next \$1 million of consideration paid by or to us, plus 5% of the next \$5 million of the consideration paid by or to us, plus 4% of the next \$1 million paid by or to us, plus 3% of the next \$1 million paid by or to us, plus 2.5% of any consideration paid by or to us in excess of \$9 million. Spencer Trask will not be entitled to a finder's fee with respect to any transaction entered into with any party with whom we had a pre-existing relationship prior to the date of the specific introduction and who was not introduced to us by Spencer Trask.

Furthermore, we granted Spencer Trask a preferential right of first refusal to act as agent with respect to future private placements of our securities for a period of 18 months from the date of the final closing of the private placement.

We agreed to indemnify Spencer Trask and other broker-dealers who are FINRA members selected by Spencer Trask to offer and sell units in the private placement, to the fullest extent permitted by law for a period of four years from the closing of the private placement, against certain liabilities that may be incurred in

connection with the private placement, including certain civil liabilities under the Securities Act, and, where such indemnification is not available, to contribute to the payments Spencer Trask may be required to make in respect of such liabilities. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to Spencer Trask, pursuant to the foregoing provisions or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Transactions between ITC and its CEO

Beginning on December 31, 2005, ITC's CEO and majority shareholder, Frank M. Reynolds, our current Chief Executive Officer, President and Chief Financial Officer, made a series of advances to ITC to fund its continuing operations until it raised additional capital. Interest accrued on these advances at an annual rate of 8%. The largest aggregate amount of this indebtedness outstanding since the beginning of the fiscal year ended December 31, 2010 was \$145,985. Interest payments totaling \$2,373 were made during the fiscal year ended December 31, 2010. All amounts advanced to ITC were paid back to Frank M. Reynolds before consummation of the merger.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors and executive officers and persons who own more than 10% of a registered class of our equity securities (collectively, "Reporting Persons") to file reports of beneficial ownership and changes in beneficial ownership with the SEC. Based solely upon review of copies of such reports, or other written representations from Reporting Persons, we believe that, during fiscal 2011, all Reporting Persons complied with all applicable requirements of Section 16(a) of the Exchange Act.

Householding of Annual Meeting Materials

Some banks, brokers and other nominee record holders may participate in the practice of "householding" proxy statements and annual reports. This means that only one copy of our Proxy Statement and 2011 Annual Report may have been sent to multiple shareholders in your household. We will promptly deliver a separate copy of the Proxy Statement and 2011 Annual Report to any beneficial owner at a shared address to which a single copy of any of those documents was delivered if you write or call us at the following address or telephone number: InVivo Therapeutics Holdings Corp., One Broadway, 14th Floor, Cambridge, MA 02142, Attn: Secretary, telephone: (617) 475-1520. If you want to receive separate copies of the Proxy Statement and Annual Report in the future, or if you are receiving multiple copies and would like to receive only one copy for your household, you should contact your bank, broker, or other nominee record holder, or you may contact InVivo at the above address and telephone number.

Other Matters

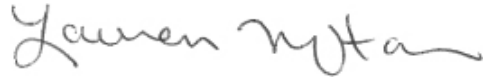
The Board does not know of any other matters which may come before the Annual Meeting. However, if any other matters do properly come before the Annual Meeting or any adjournments or postponements thereof, the Board intends that the persons named in the proxies will vote upon such matters in accordance with their best judgment.

Shareholder Proposals

Any proposal that a shareholder wishes to be considered for inclusion in our proxy statement and proxy card for our 2013 Annual Meeting of Shareholders (the "2013 Annual Meeting") must be submitted to the Secretary at our offices, One Broadway, 14th Floor, Cambridge, Massachusetts 02142, no later than December 21, 2012. In addition, such proposals must comply with the requirements of Rule 14a-8 under the Exchange Act and our bylaws, as applicable.

If a shareholder wishes to present a proposal or nominate a director before the 2013 Annual Meeting, but does not wish to have the proposal considered for inclusion in the proxy statement and proxy card, such shareholder must also give written notice to the Secretary at the address noted above. The Secretary must receive such notice no earlier than March 1, 2013 and no later than March 31, 2013 and the shareholder must comply with the provisions of our bylaws.

By order of the Board of Directors,

A handwritten signature in dark ink, appearing to read "Lauren Mitarotondo". The signature is fluid and cursive, with the first name "Lauren" being more prominent and the last name "Mitarotondo" written in a more compact, connected style.

LAUREN MITAROTONDO
Secretary

April 20, 2012

Explanatory Note: This Exhibit A contains a copy of the InVivo Therapeutics Holdings Corp. 2010 Equity Incentive Plan, as amended by the proposed amendment described in the proxy statement to which this Appendix A is attached.

**INVIVO THERAPEUTICS HOLDINGS CORP.
2010 EQUITY INCENTIVE PLAN**

1. Purposes of the Plan. The purposes of this Plan are:

- to attract and retain the best available personnel for positions of substantial responsibility,
- to provide incentives to individuals who perform services for the Company, and
- to promote the success of the Company's business.

The Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units, Performance Shares and other stock or cash awards as the Administrator may determine.

2. Definitions. As used herein, the following definitions will apply:

(a) “Administrator” means the Board or any of its Committees as will be administering the Plan, in accordance with Section 4 hereof.

(b) “Affiliate” means any corporation or any other entity (including, but not limited to, partnerships and joint ventures) controlling, controlled by, or under common control with the Company.

(c) “Applicable Laws” means the requirements relating to the administration of equity-based awards under U.S. federal and state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan.

(d) “Award” means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units, Performance Shares and other stock or cash awards as the Administrator may determine.

(e) “Award Agreement” means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.

(f) “Board” means the Board of Directors of the Company.

(g) “Change in Control” means the occurrence of any of the following events

i. A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group (“Person”), acquires ownership of stock in the Company that, together with the stock already held by such Person, constitutes more than 50% of the total voting power of the stock of the Company; provided, however, that for purposes of this subsection (i), the acquisition of additional stock by any Person who is considered to own more than 50% of the total voting power of the stock of the Company before the acquisition will not be considered a Change in Control; or

ii. A change in the effective control of the Company, which occurs on the date that a majority of the members of the Board are replaced during any twelve (12) month period by Directors whose appointment or

election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this subsection (ii), if any Person is considered to effectively control the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

iii. A change in the ownership of a substantial portion of the Company's assets, which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such Person) assets from the Company that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (iii), the following will not constitute a change in the ownership of a substantial portion of the Company's assets or a Change in Control: (A) a transfer to an entity that is controlled by the Company's stockholders immediately after the transfer, or (B) a transfer of assets by the Company to: (1) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's stock, (2) an entity, 50% or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (3) a Person that owns, directly or indirectly, 50% or more of the total value or voting power of all the outstanding stock of the Company, or (4) an entity, at least 50% of the total equity or voting power of which is owned, directly or indirectly, by a Person described in subsection (iii)(B)(3) above. For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

Notwithstanding the foregoing, as to any Award under the Plan that consists of deferred compensation subject to Section 409A of the Code, the definition of "Change in Control" shall be deemed modified to the extent necessary to comply with Section 409A of the Code.

For purposes of this Section 2(g), persons will be considered to be acting as a group if they are owners of a corporation or other entity that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

(h) "Code" means the Internal Revenue Code of 1986, as amended. Any reference to a section of the Code herein will be a reference to any successor or amended section of the Code.

(i) "Committee" means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board in accordance with Section 4 hereof.

(j) "Common Stock" means the common stock, par value \$0.00001 per share, of the Company.

(k) "Company." means InVivo Therapeutics Holdings Corp., a Nevada corporation, or any successor thereto.

(l) "Consultant" means any person, including an advisor, engaged by the Company or a Parent, Subsidiary or Affiliate to render services to such entity.

(m) "Determination Date" means the latest possible date that will not jeopardize the qualification of an Award granted under the Plan as "performance-based compensation" under Section 162(m) of the Code.

(n) "Director" means a member of the Board.

(o) "Disability." means permanent and total disability as defined in Section 22(e)(3) of the Code, provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time.

(p) “Employee” means any person, including Officers and Directors, employed by the Company or any Parent, Subsidiary or Affiliate of the Company. Neither service as a Director nor payment of a director’s fee by the Company will be sufficient to constitute “employment” by the Company.

(q) “Exchange Act” means the Securities Exchange Act of 1934, as amended.

(r) “Exchange Program” means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for Awards of the same type (which may have lower exercise prices and different terms), Awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Administrator, and/or (iii) the exercise price of an outstanding Award is reduced. The Administrator will determine the terms and conditions of any Exchange Program in its sole discretion.

(s) “Fair Market Value” means, as of any date, the value of the Common Stock as the Administrator may determine in good faith, by reference to the closing price of such stock on any established stock exchange or on a national market system on the day of determination, if the Common Stock is so listed on any established stock exchange or on a national market system. If the Common Stock is not listed on any established stock exchange or on a national market system, the value of the Common Stock will be determined as the Administrator may determine in good faith.

(t) “Fiscal Year” means the fiscal year of the Company.

(u) “Incentive Stock Option” means an Option that by its terms qualifies and is otherwise intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

(v) “Nonstatutory Stock Option” means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.

(w) “Officer” means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(x) “Option” means a stock option granted pursuant to Section 6 hereof.

(y) “Parent” means a “parent corporation,” whether now or hereafter existing, as defined in Section 424(e) of the Code.

(z) “Participant” means the holder of an outstanding Award.

(aa) “Performance Goals” will have the meaning set forth in Section 11 hereof.

(bb) “Performance Period” means any Fiscal Year of the Company or such other period as determined by the Administrator in its sole discretion.

(cc) “Performance Share” means an Award denominated in Shares which may be earned in whole or in part upon attainment of Performance Goals or other vesting criteria as the Administrator may determine pursuant to Section 10 hereof.

(dd) “Performance Unit” means an Award which may be earned in whole or in part upon attainment of Performance Goals or other vesting criteria as the Administrator may determine and which may be settled for cash, Shares or other securities or a combination of the foregoing pursuant to Section 10 hereof.

(ee) “Period of Restriction” means the period during which transfers of Shares of Restricted Stock are subject to restrictions and, therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.

(ff) “Plan” means this 2010 Equity Incentive Plan.

(gg) “Restricted Stock” means Shares issued pursuant to an Award of Restricted Stock under Section 8 hereof, or issued pursuant to the early exercise of an Option.

(hh) “Restricted Stock Unit” means a bookkeeping entry representing an amount equal to the Fair Market Value of one Share, granted pursuant to Section 9 hereof. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.

(ii) “Rule 16b-3” means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.

(jj) “Section 16(b)” means Section 16(b) of the Exchange Act.

(kk) “Service Provider” means an Employee, Director, or Consultant.

(ll) “Share” means a share of the Common Stock, as adjusted in accordance with Section 14 hereof.

(mm) “Stock Appreciation Right” means an Award, granted alone or in connection with an Option, that pursuant to Section 7 is designated as a Stock Appreciation Right.

(nn) “Subsidiary” means a “subsidiary corporation,” whether now or hereafter existing, as defined in Section 424(f) of the Code.

3. Stock Subject to the Plan.

(a) Subject to the provisions of Section 14 hereof, the maximum aggregate number of Shares that may be awarded and sold under the Plan is 6,500,000 Shares. The Shares may be authorized, but unissued, or reacquired Common Stock.

(b) Lapsed Awards. If an Award expires or becomes unexercisable without having been exercised in full, or, with respect to Restricted Stock, Restricted Stock Units, Performance Shares or Performance Units, is forfeited to or repurchased by the Company, the unpurchased Shares (or for Awards other than Options and Stock Appreciation Rights, the forfeited or repurchased Shares) which were subject thereto will become available for future grant or sale under the Plan (unless the Plan has terminated). Upon exercise of a Stock Appreciation Right settled in Shares, the gross number of Shares covered by the portion of the Award so exercised will cease to be available under the Plan. Shares that have actually been issued under the Plan under any Award will not be returned to the Plan and will not become available for future distribution under the Plan; provided, however, that if unvested Shares of Restricted Stock, Restricted Stock Units, Performance Shares or Performance Units are repurchased by the Company or are forfeited to the Company, such Shares will become available for future grant under the Plan. Shares used to pay the tax and/or exercise price of an Award will become available for future grant or sale under the Plan. To the extent an Award under the Plan is paid out in cash rather than Shares, such cash payment will not result in reducing the number of Shares available for issuance under the Plan. Notwithstanding the foregoing provisions of this Section 3(b), subject to adjustment provided in Section 14 hereof, the maximum number of Shares that may be issued upon the exercise of Incentive Stock Options will equal the aggregate Share number stated in Section 3(a) above, plus, to the extent allowable under Section 422 of the Code, any Shares that become available for issuance under the Plan under this Section 3(b).

(c) Share Reserve. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

(d) Limitation on Number of Shares Subject to Awards. Notwithstanding any provision in the Plan to the contrary, the maximum aggregate number of Shares with respect to one or more Awards that may be granted to any one person during any calendar year (measured from the date of any grant) shall be 2,000,000 and the maximum aggregate amount of cash that may be paid in cash during any calendar year (measured from the date of any payment) with respect to one or more Awards payable in cash shall be \$2,000,000.”

4. Administration of the Plan.

(a) Procedure.

i. Multiple Administrative Bodies. Different Committees with respect to different groups of Service Providers may administer the Plan.

ii. Section 162(m). To the extent that the Administrator determines it to be desirable to qualify Awards granted hereunder as “performance-based compensation” within the meaning of Section 162(m) of the Code, the Plan will be administered by a Committee of two (2) or more “outside directors” within the meaning of Section 162(m) of the Code.

iii. Rule 16b-3. To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder will be structured to satisfy the requirements for exemption under Rule 16b-3.

iv. Other Administration. Other than as provided above, the Plan will be administered by (A) the Board or (B) a Committee, which committee will be constituted to satisfy Applicable Laws.

(b) Powers of the Administrator. Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator will have the authority, in its discretion:

i. to determine the Fair Market Value;

ii. to select the Service Providers to whom Awards may be granted hereunder;

iii. to determine the terms and condition, not inconsistent with the terms of the Plan, of any Award granted hereunder;

iv. to institute an Exchange Program and to determine the terms and conditions, not inconsistent with the terms of the Plan, for (1) the surrender or cancellation of outstanding Awards in exchange for Awards of the same type, Awards of a different type, and/or cash, (2) the transfer of outstanding Awards to a financial institution or other person or entity, or (3) the reduction of the exercise price of outstanding Awards;

v. to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;

vi. to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws;

vii. to modify or amend each Award (subject to Section 19(c) hereof);

viii. to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;

ix. to allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that would otherwise be due to such Participant under an Award pursuant to such procedures as the Administrator may determine; and

x. to make all other determinations deemed necessary or advisable for administering the Plan.

(c) Effect of Administrator’s Decision. The Administrator’s decisions, determinations, and interpretations will be final and binding on all Participants and any other holders of Awards.

5. Eligibility. Nonstatutory Stock Options, Restricted Stock, Restricted Stock Units, Stock Appreciation Rights, Performance Units, Performance Shares, and such other cash or stock awards as the Administrator determines may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

6. Stock Options.

(a) Limitations.

i. Each Option will be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Participant during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds \$100,000 (U.S.), such Options will be treated as Nonstatutory Stock Options. For purposes of this Section 6(a), Incentive Stock Options will be taken into account in the order in which they were granted. The Fair Market Value of the Shares will be determined as of the time the Option with respect to such Shares is granted.

ii. The Administrator will have complete discretion to determine the number of Shares subject to an Option granted to any Participant.

(b) Term of Option. The Administrator will determine the term of each Option in its sole discretion; provided, however, that the term will be no more than ten (10) years from the date of grant thereof. Moreover, in the case of an Incentive Stock Option granted to a Participant who, at the time the Incentive Stock Option is granted, owns stock representing more than 10% of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option will be five (5) years from the date of grant or such shorter term as may be provided in the Award Agreement.

(c) Option Exercise Price and Consideration.

i. **Exercise Price.** The per share exercise price for the Shares to be issued pursuant to exercise of an Option will be determined by the Administrator, but will be no less than 100% of the Fair Market Value per Share on the date of grant. In addition, in the case of an Incentive Stock Option granted to an Employee who, at the time the Incentive Stock Option is granted, owns stock representing more than 10% of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price will be no less than 110% of the Fair Market Value per Share on the date of grant. Notwithstanding the foregoing provisions of this Section 6(c), Options may be granted with a per Share exercise price of less than 100% of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code.

ii. **Waiting Period and Exercise Dates.** At the time an Option is granted, the Administrator will fix the period within which the Option may be exercised and will determine any conditions that must be satisfied before the Option may be exercised.

iii. **Form of Consideration.** The Administrator will determine the acceptable form(s) of consideration for exercising an Option, including the method of payment, to the extent permitted by Applicable Laws.

(d) Exercise of Option.

i. **Procedure for Exercise; Rights as a Stockholder.** Any Option granted hereunder will be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. An Option may not be exercised for a fraction of a Share.

An Option will be deemed exercised when the Company receives: (i) notice of exercise (in such form as the Administrator specifies from time to time) from the person entitled to exercise the Option, and (ii) full

payment for the Shares with respect to which the Option is exercised (together with any applicable withholding taxes). No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 14 hereof.

ii. Termination of Relationship as a Service Provider. If a Participant ceases to be a Service Provider, other than upon the Participant's termination as the result of the Participant's death or Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent that the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for three (3) months following the Participant's termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified by the Administrator, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

iii. Disability of Participant. If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for six (6) months following the Participant's termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

iv. Death of Participant. If a Participant dies while a Service Provider, the Option may be exercised within such period of time as is specified in the Award Agreement to the extent that the Option is vested on the date of death (but in no event may the option be exercised later than the expiration of the term of such Option as set forth in the Award Agreement), by the Participant's designated beneficiary, provided such beneficiary has been designated prior to Participant's death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. In the absence of a specified time in the Award Agreement, the Option will remain exercisable for six (6) months following Participant's death. Unless otherwise provided by the Administrator, if at the time of death Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will continue to vest in accordance with the Award Agreement. If the Option is not so exercised within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

7. Stock Appreciation Rights.

(a) Grant of Stock Appreciation Rights. Subject to the terms and conditions of the Plan, a Stock Appreciation Right may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion.

(b) Number of Shares. The Administrator will have complete discretion to determine the number of Stock Appreciation Rights granted to any Participant.

(c) Exercise Price and Other Terms. The Administrator, subject to the provisions of the Plan, will have complete discretion to determine the terms and conditions of Stock Appreciation Rights granted under the Plan; provided, however, that the exercise price will be not less than 100% of the Fair Market Value of a Share on the date of grant.

(d) Stock Appreciation Rights Agreement. Each Stock Appreciation Right grant will be evidenced by an Award Agreement that will specify the exercise price, the term of the Stock Appreciation Right, the conditions of exercise, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(e) Expiration of Stock Appreciation Rights. A Stock Appreciation Right granted under the Plan will expire upon the date determined by the Administrator, in its sole discretion, and set forth in the Award Agreement; provided, however, that the term will be no more than ten (10) years from the date of grant thereof. Notwithstanding the foregoing, the rules of Section 6(d) above also will apply to Stock Appreciation Rights.

(f) Payment of Stock Appreciation Right Amount. Upon exercise of a Stock Appreciation Right, a Participant will be entitled to receive payment from the Company in an amount determined by multiplying:

- i. The difference between the Fair Market Value of a Share on the date of exercise over the exercise price; times
- ii. The number of Shares with respect to which the Stock Appreciation Right is exercised.

At the discretion of the Administrator, the payment upon Stock Appreciation Right exercise may be in cash, in Shares of equivalent value, or in some combination thereof.

8. Restricted Stock.

(a) Grant of Restricted Stock. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator, in its sole discretion, will determine.

(b) Restricted Stock Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify the Period of Restriction, the number of Shares granted, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(c) Transferability. Except as provided in this Section 8, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable Period of Restriction.

(d) Other Restrictions. The Administrator, in its sole discretion, may impose such other restrictions on Shares of Restricted Stock as it may deem advisable or appropriate.

(e) Removal of Restrictions. Except as otherwise provided in this Section 8, Shares of Restricted Stock covered by each Restricted Stock grant made under the Plan will be released from escrow as soon as practicable after the last day of the Period of Restriction. The Administrator, in its discretion, may accelerate the time at which any restrictions will lapse or be removed.

(f) Voting Rights. During the Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.

(g) Dividends and Other Distributions. During the Period of Restriction, Service Providers holding Shares of Restricted Stock will be entitled to receive all dividends and other distributions paid with respect to such Shares unless otherwise provided in the Award Agreement. If any such dividends or distributions are paid in Shares, the Shares will be subject to the same restrictions on transferability and forfeitability as the Shares of Restricted Stock with respect to which they were paid.

(h) Return of Restricted Stock to Company. On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.

(i) Section 162(m) Performance Restrictions. For purposes of qualifying grants of Restricted Stock as “performance-based compensation” under Section 162(m) of the Code, the Administrator, in its discretion, may set restrictions based upon the achievement of Performance Goals. The Performance Goals will be set by the Administrator on or before the Determination Date. In granting Restricted Stock which is intended to qualify under Section 162(m) of the Code, the Administrator will follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Award under Section 162(m) of the Code (e.g., in determining the Performance Goals).

9. Restricted Stock Units.

(a) Grant. Restricted Stock Units may be granted at any time and from time to time as determined by the Administrator. Each Restricted Stock Unit grant will be evidenced by an Award Agreement that will specify such other terms and conditions as the Administrator, in its sole discretion, will determine, including all terms, conditions, and restrictions related to the grant, the number of Restricted Stock Units and the form of payout, which, subject to Section 9(d) hereof, may be left to the discretion of the Administrator.

(b) Vesting Criteria and Other Terms. The Administrator will set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will be paid out to the Participant. After the grant of Restricted Stock Units, the Administrator, in its sole discretion, may reduce or waive any restrictions for such Restricted Stock Units. Each Award of Restricted Stock Units will be evidenced by an Award Agreement that will specify the vesting criteria, and such other terms and conditions as the Administrator, in its sole discretion will determine. The Administrator, in its discretion, may accelerate the time at which any restrictions will lapse or be removed.

(c) Earning Restricted Stock Units. Upon meeting the applicable vesting criteria, the Participant will be entitled to receive a payout as specified in the Award Agreement.

(d) Form and Timing of Payment. Payment of earned Restricted Stock Units will be made as soon as practicable after the date(s) set forth in the Award Agreement. The Administrator, in its sole discretion, may pay earned Restricted Stock Units in cash, Shares, or a combination thereof. Shares represented by Restricted Stock Units that are fully paid in cash again will be available for grant under the Plan.

(e) Cancellation. On the date set forth in the Award Agreement, all unearned Restricted Stock Units will be forfeited to the Company.

(f) Section 162(m) Performance Restrictions. For purposes of qualifying grants of Restricted Stock Units as “performance-based compensation” under Section 162(m) of the Code, the Administrator, in its discretion, may set restrictions based upon the achievement of Performance Goals. The Performance Goals will be set by the Administrator on or before the Determination Date. In granting Restricted Stock Units which are intended to qualify under Section 162(m) of the Code, the Administrator will follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Award under Section 162(m) of the Code (e.g., in determining the Performance Goals).

10. Performance Units and Performance Shares.

(a) Grant of Performance Units/Shares. Performance Units and Performance Shares may be granted to Service Providers at any time and from time to time, as will be determined by the Administrator, in its sole discretion. The Administrator will have complete discretion in determining the number of Performance Units/Shares granted to each Participant.

(b) Value of Performance Units/Shares. Each Performance Unit will have an initial value that is established by the Administrator on or before the date of grant. Each Performance Share will have an initial value equal to the Fair Market Value of a Share on the date of grant.

(c) Performance Objectives and Other Terms. The Administrator will set performance objectives or other vesting provisions. The Administrator may set vesting criteria based upon the achievement of Company-wide, business unit, or individual goals (including, but not limited to, continued employment), or any other basis determined by the Administrator in its discretion. Each Award of Performance Units/Shares will be evidenced by an Award Agreement that will specify the Performance Period, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(d) Earning of Performance Units/Shares. After the applicable Performance Period has ended, the holder of Performance Units/Shares will be entitled to receive a payout of the number of Performance Units/Shares earned by the Participant over the Performance Period, to be determined as a function of the extent to which the corresponding performance objectives or other vesting provisions have been achieved. After the grant of a Performance Unit/Share, the Administrator, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such Performance Unit/Share.

(e) Form and Timing of Payment of Performance Units/Shares. Payment of earned Performance Units/Shares will be made as soon as practicable after the expiration of the applicable Performance Period. The Administrator, in its sole discretion, may pay earned Performance Units/Shares in the form of cash, in Shares (which have an aggregate Fair Market Value equal to the value of the earned Performance Units/Shares at the close of the applicable Performance Period) or in a combination thereof.

(f) Cancellation of Performance Units/Shares. On the date set forth in the Award Agreement, all unearned or unvested Performance Units/Shares will be forfeited to the Company, and again will be available for grant under the Plan.

(g) Section 162(m) Performance Restrictions. For purposes of qualifying grants of Performance Units/Shares as “performance-based compensation” under Section 162(m) of the Code, the Administrator, in its discretion, may set restrictions based upon the achievement of Performance Goals. The Performance Goals will be set by the Administrator on or before the Determination Date. In granting Performance Units/Shares which are intended to qualify under Section 162(m) of the Code, the Administrator will follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Award under Section 162(m) of the Code (e.g., in determining the Performance Goals).

11. Performance-Based Compensation Under Code Section 162(m).

(a) General. If the Administrator, in its discretion, decides to grant an Award intended to qualify as “performance-based compensation” under Code Section 162(m), the provisions of this Section 11 will control over any contrary provision in the Plan; provided, however, that the Administrator may in its discretion grant Awards that are not intended to qualify as “performance-based compensation” under Section 162(m) of the Code to such Participants that are based on Performance Goals or other specific criteria or goals but that do not satisfy the requirements of this Section 11.

(b) Performance Goals. The granting and/or vesting of Awards of Restricted Stock, Restricted Stock Units, Performance Shares and Performance Units and other incentives under the Plan may be made subject to the attainment of performance goals relating to one or more business criteria within the meaning of Code Section 162(m) and may provide for a targeted level or levels of achievement (“Performance Goals”) including (i) earnings per Share, (ii) operating cash flow, (iii) operating income, (iv) profit after-tax, (v) profit before-tax, (vi) return on assets, (vii) return on equity, (viii) return on sales, (ix) revenue, and (x) total shareholder return.

Any Performance Goals may be used to measure the performance of the Company as a whole or a business unit of the Company and may be measured relative to a peer group or index. The Performance Goals may differ from Participant to Participant and from Award to Award. Prior to the Determination Date, the Administrator will determine whether any significant element(s) will be included in or excluded from the calculation of any Performance Goal with respect to any Participant.

(c) Procedures. To the extent necessary to comply with the performance-based compensation provisions of Code Section 162(m), with respect to any Award granted subject to Performance Goals, within the first twenty-five percent (25%) of the Performance Period, but in no event more than ninety (90) days following the commencement of any Performance Period (or such other time as may be required or permitted by Code Section 162(m)), the Administrator will, in writing, (i) designate one or more Participants to whom an Award will be made, (ii) select the Performance Goals applicable to the Performance Period, (iii) establish the Performance Goals, and amounts of such Awards, as applicable, which may be earned for such Performance Period, and (iv) specify the relationship between Performance Goals and the amounts of such Awards, as applicable, to be earned by each Participant for such Performance Period. Following the completion of each Performance Period, the Administrator will certify in writing whether the applicable Performance Goals have been achieved for such Performance Period. In determining the amounts earned by a Participant, the Administrator will have the right to reduce or eliminate (but not to increase) the amount payable at a given level of performance to take into account additional factors that the Administrator may deem relevant to the assessment of individual or corporate performance for the Performance Period. A Participant will be eligible to receive payment pursuant to an Award for a Performance Period only if the Performance Goals for such period are achieved.

(d) Additional Limitations. Notwithstanding any other provision of the Plan, any Award which is granted to a Participant and is intended to constitute qualified performance based compensation under Code Section 162(m) will be subject to any additional limitations set forth in the Code (including any amendment to Section 162(m)) or any regulations and ruling issued thereunder that are requirements for qualification as qualified performance-based compensation as described in Section 162(m) of the Code, and the Plan will be deemed amended to the extent necessary to conform to such requirements.

12. Leaves of Absence. Unless the Administrator provides otherwise, vesting of Awards granted hereunder will be suspended during any unpaid leave of absence. A Service Provider will not cease to be an Employee in the case of (i) any leave of absence approved by the Company, or (ii) transfers between locations of the Company or between the Company, its Parent, or any Subsidiary. For purposes of Incentive Stock Options, no such leave may exceed three (3) months, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then six (6) months and one day following the commencement of such leave any Incentive Stock Option held by the Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.

13. Transferability of Awards. Unless determined otherwise by the Administrator, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, such Award may only be transferred (i) by will, (ii) by the laws of descent and distribution, (iii) to a revocable trust, or (iii) as permitted by Rule 701 of the Securities Act of 1933, as amended.

14. Adjustments; Dissolution or Liquidation; Merger or Change in Control.

(a) Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger,

consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, will adjust the number and class of Shares that may be delivered under the Plan and/or the number, class, and price of Shares covered by each outstanding Award, and the numerical Share limits set forth in Sections 3, 6, 7, 8, 9 and 10 hereof.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

(c) Change in Control. In the event of a merger or Change in Control, each outstanding Award will be treated as the Administrator determines, including, without limitation, that each Award will be assumed or an equivalent option or right substituted by the successor corporation or a Parent or Subsidiary of the successor corporation (the "Successor Corporation"). The Administrator will not be required to treat all Awards similarly in the transaction.

In the event that the Successor Corporation does not assume or substitute for the Award, the Participant will fully vest in and have the right to exercise all of his or her outstanding Options and Stock Appreciation Rights, including Shares as to which such Awards would not otherwise be vested or exercisable, all restrictions on Restricted Stock will lapse, and, with respect to Restricted Stock Units, Performance Shares and Performance Units, all Performance Goals or other vesting criteria will be deemed achieved at target levels and all other terms and conditions met. In addition, if an Option or Stock Appreciation Right is not assumed or substituted for in the event of a Change in Control, the Administrator will notify the Participant in writing or electronically that the Option or Stock Appreciation Right will be fully vested and exercisable for a period of time determined by the Administrator in its sole discretion, and the Option or Stock Appreciation Right will terminate upon the expiration of such period.

For the purposes of this subsection (c), an Award will be considered assumed if, following the Change in Control, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the Change in Control, the consideration (whether stock, cash, or other securities or property) or, in the case of a Stock Appreciation Right upon the exercise of which the Administrator determines to pay cash or a Performance Share or Performance Unit which the Administrator can determine to pay in cash, the fair market value of the consideration received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the Change in Control is not solely common stock of the Successor Corporation, the Administrator may, with the consent of the Successor Corporation, provide for the consideration to be received upon the exercise of an Option or Stock Appreciation Right or upon the payout of a Performance Share or Performance Unit, for each Share subject to such Award (or in the case of Performance Units, the number of implied shares determined by dividing the value of the Performance Units by the per share consideration received by holders of Common Stock in the Change in Control), to be solely common stock of the Successor Corporation equal in fair market value to the per share consideration received by holders of Common Stock in the Change in Control.

Notwithstanding anything in this Section 14(c) to the contrary, an Award that vests, is earned or paid-out upon the satisfaction of one or more Performance Goals will not be considered assumed if the Company or its successor modifies any of such Performance Goals without the Participant's consent; provided, however, a modification to such Performance Goals only to reflect the Successor Corporation's post-Change in Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption. In the case of an Award providing for the payment of deferred compensation subject to Section 409A of the Code, any payment of

such deferred compensation by reason of a Change in Control shall be made only if the Change in Control is one described in subsection (a)(2)(A)(v) of Section 409A and the guidance thereunder and shall be paid consistent with the requirements of Section 409A. If any deferred compensation that would otherwise be payable by reason of a Change in Control cannot be paid by reason of the immediately preceding sentence, it shall be paid as soon as practicable thereafter consistent with the requirements of Section 409A, as determined by the Administrator.

15. Tax Withholding.

(a) Withholding Requirements. Prior to the delivery of any Shares or cash pursuant to an Award (or exercise thereof), the Company will have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy federal, state, local, foreign or other taxes (including the Participant's FICA obligation) required to be withheld with respect to such Award (or exercise thereof).

(b) Withholding Arrangements. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such tax withholding obligation, in whole or in part by (without limitation) (i) paying cash, (ii) electing to have the Company withhold otherwise deliverable cash or Shares having a Fair Market Value equal to the minimum amount required to be withheld, (iii) delivering to the Company already-owned Shares having a Fair Market Value equal to the amount required to be withheld, or (iv) selling a sufficient number of Shares otherwise deliverable to the Participant through such means as the Administrator may determine in its sole discretion (whether through a broker or otherwise) equal to the amount required to be withheld. The amount of the withholding requirement will be deemed to include any amount which the Administrator agrees may be withheld at the time the election is made, not to exceed the amount determined by using the maximum federal, state or local marginal income tax rates applicable to the Participant with respect to the Award on the date that the amount of tax to be withheld is to be determined. The Fair Market Value of the Shares to be withheld or delivered will be determined as of the date that the taxes are required to be withheld.

16. No Effect on Employment or Service. Neither the Plan nor any Award will confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider with the Company, nor will they interfere in any way with the Participant's right or the Company's right to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.

17. Date of Grant. The date of grant of an Award will be, for all purposes, the date on which the Administrator makes the determination granting such Award, or such other later date as is determined by the Administrator. Notice of the determination will be provided to each Participant within a reasonable time after the date of such grant.

18. Term of Plan. Subject to Section 22 hereof, the Plan will become effective upon its adoption by the Board. It will continue in effect for a term of ten (10) years unless terminated earlier under Section 19 hereof.

19. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Administrator may at any time amend, alter, suspend or terminate the Plan.

(b) Stockholder Approval. The Company will obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

(c) Effect of Amendment or Termination. No amendment, alteration, suspension, or termination of the Plan will impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination.

20. Conditions Upon Issuance of Shares.

(a) Legal Compliance. Shares will not be issued pursuant to the exercise of an Award unless the exercise of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

(c) Restrictive Legends. All Award Agreements and all securities of the Company issued pursuant thereto shall bear such legends regarding restrictions on transfer and such other legends as the appropriate officer of the Corporation shall determine to be necessary or advisable to comply with applicable securities and other laws.

21. Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, will relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority will not have been obtained.

22. Stockholder Approval. The Plan will be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted by the Board. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws. In the event that stockholder approval is not obtained within twelve (12) months after the date the Plan is adopted by the Board, the Plan and all Awards granted hereunder shall be void ab initio and of no effect. Notwithstanding any other provisions of the Plan, no Awards shall be exercisable until the date of such stockholder approval.

23. Notification of Election Under Section 83(b) of the Code. If any Service Provider shall, in connection with the acquisition of Shares under the Plan, make the election permitted under Section 83(b) of the Code, such Service Provider shall notify the Company of such election within ten (10) days of filing notice of the election with the Internal Revenue Service and provide the Company with a copy thereof, in addition to any filing and a notification required pursuant to regulations issued under the authority of Section 83(b) of the Code. A Service Provider shall not be permitted to make a Section 83(b) election with respect to an Award of a Restricted Stock Unit.

24. Notification Upon Disqualifying Disposition Under Section 421(b) of the Code. Each Service Provider shall notify the Company of any disposition of Shares issued pursuant to the exercise of an Incentive Stock Option under the circumstances described in Section 421(b) of the Code (relating to certain disqualifying dispositions), within ten (10) days of such disposition.

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS
FOR THE ANNUAL MEETING OF SHAREHOLDERS
TO BE HELD ON MAY 30, 2012**

**To access the Company's Proxy Statement for the 2012 Annual Meeting of Shareholders
and the Company's 2011 Annual Report, visit:**

<http://www.cstproxy.com/invivotherapeutics/2012>

qFOLD AND DETACH HERE AND READ THE REVERSE SIDEq

PROXY CARD

INVIVO THERAPEUTICS HOLDINGS CORP.

**One Broadway, 14th Floor
Cambridge, MA 02142**

**THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS
ANNUAL MEETING OF SHAREHOLDERS – MAY 30, 2012**

The undersigned hereby appoints Frank M. Reynolds and Lauren Mitarotondo, and each of them severally, as proxies of the undersigned, each with full power to appoint his substitute, to represent the undersigned at the Annual Meeting (the "Annual Meeting") of Shareholders of InVivo Therapeutics Holdings Corp. (the "Company") to be held on May 30, 2012, and at any adjournments thereof, and to vote thereat all shares of common stock of the Company held of record by the undersigned at the close of business on April 18, 2012 in accordance with the instructions set forth on this proxy card and, in their discretion, to vote such shares on any other business as may properly come before the Annual Meeting and on matters incident to the conduct of the Annual Meeting. Any proxy heretofore given by the undersigned with respect to such stock is hereby revoked.

PLEASE MARK, DATE AND SIGN THIS PROXY ON THE REVERSE SIDE AND RETURN IT IN THE ENCLOSED ENVELOPE

q FOLD AND DETACH HERE AND READ THE REVERSE SIDE q

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" EACH OF THE FOLLOWING PROPOSALS

PROXY Please mark
your votes
like this ☒

1. Election of Class I director.

2. Approval of amendment to our 2010 Equity Incentive Plan.

NOMINEE:
Richard J. Roberts

FOR
NOMINEE

WITHHOLD
AUTHORITY

☐☐

FOR AGAINST ABSTAIN

☐☐☐

FOR AGAINST ABSTAIN

☐☐☐

3. Ratification of the appointment of Wolf & Company, P.C., an independent registered public accounting firm, as our independent auditor for the fiscal year ending December 31, 2012.

4. In their discretion, the proxy holders are authorized to vote upon such other matters as may properly come before the Annual Meeting or any postponement or adjournment thereof.

THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED AS INDICATED. IF NO CONTRARY INDICATION IS MADE, THIS PROXY WILL BE VOTED IN FAVOR OF EACH PROPOSAL AND IN ACCORDANCE WITH THE JUDGMENT OF THE PERSONS NAMED AS THE PROXIES HEREIN ON ANY OTHER MATTERS THAT MAY PROPERLY COME BEFORE THE ANNUAL MEETING.

The undersigned acknowledges receipt of the accompanying Notice of Annual Meeting of Shareholders and Proxy Statement for the May 30, 2012 meeting.

COMPANY ID:

PROXY NUMBER:

ACCOUNT NUMBER:

Signature _____ Signature _____ Date _____, 2012.

NOTE: Please sign exactly as your name or names appears hereon. When shares are held by joint owners, both must sign. When signing as attorney, executor, administrator, trustee or guardian, please give title as such. If a corporation, please sign in full corporate name by president or other authorized officer. If a partnership, please sign in partnership name by authorized person.