

**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

Organovo Holdings, Inc.

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- 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:

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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:



September 17, 2012

Dear Stockholder:

You are cordially invited to attend the 2012 Annual Meeting of Stockholders of Organovo Holdings, Inc. to be held on October 17, 2012 at 9:00 a.m. Pacific Time. The 2012 Annual Meeting will be held at our principal executive offices, located at 6275 Nancy Ridge Dr., San Diego, California 92121. The 2012 Annual Meeting will commence with a discussion and voting on the matters set forth in the accompanying Notice of Annual Meeting of Stockholders followed by a report on our operations.

Our Notice of Annual Meeting of Stockholders and Proxy Statement, which more fully describes the formal business to be conducted at the 2012 Annual Meeting, accompany this letter. A copy of our 2011 Annual Report to Stockholders also accompanies this letter, which report contains the information we initially filed with the Securities and Exchange Commission on May 11, 2012 as part of our Current Report on Form 8-K/A.

Whether or not you plan to attend the 2012 Annual Meeting, your vote is very important and we encourage you to vote promptly. After reading the Proxy Statement, please promptly mark, sign and date the enclosed Proxy Card and return it in the prepaid envelope provided. Alternatively, you may vote your shares via a toll-free telephone number or over the Internet. Instructions regarding all three methods of voting are provided on the Proxy Card. If you attend the 2012 Annual Meeting you will, of course, have the right to revoke the proxy and vote your shares in person.

We look forward to seeing you at the 2012 Annual Meeting.

Sincerely yours,

/s/ Keith Murphy

Keith Murphy
*President and
Chief Executive Officer*

ORGANOVO HOLDINGS, INC.
NOTICE OF 2012 ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON OCTOBER 17, 2012

TO OUR STOCKHOLDERS:

The 2012 Annual Meeting of Stockholders of Organovo Holdings, Inc., a Delaware corporation (the "Company"), will be held at the Company's principal executive offices located at 6275 Nancy Ridge Dr., San Diego, California 92121 on October 17, 2012 at 9:00 a.m. Pacific Time for the following purposes:

1. To elect Keith Murphy as a Class I director to hold office for a three (3)-year term and until his successor is elected and qualified;
2. To approve the revised performance criteria and the award limitations under the Organovo Holdings, Inc. 2012 Equity Incentive Plan to ensure that the Company may fully deduct the amount or value of performance awards granted under the plan;
3. To ratify the appointment of Mayer Hoffman McCann P.C. as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2012; and
4. To transact such other business as may properly be brought before the 2012 Annual Meeting or any adjournment or postponement thereof.

Our Board of Directors recommends a vote "FOR" Keith Murphy as a Class I director and "FOR" each of the other proposals listed above. Stockholders of record at the close of business on September 7, 2012 are entitled to notice of, and to vote on, all matters at the 2012 Annual Meeting and any reconvened meeting following any adjournments or postponements thereof. For ten days prior to the 2012 Annual Meeting, a complete list of stockholders entitled to vote at the 2012 Annual Meeting will be available for examination by any stockholder, for any purpose relating to the 2012 Annual Meeting, during ordinary business hours at the Company's principal executive offices located at 6275 Nancy Ridge Dr., San Diego, California 92121.

By Order of the Board of Directors

/s/ Barry Michaels

Barry Michaels
Chief Financial Officer and Secretary

September 17, 2012

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE ANNUAL STOCKHOLDER MEETING TO BE HELD ON OCTOBER 17, 2012:

Our Notice, Proxy Statement, Annual Report and Proxy Card are available on the Internet and may be viewed at www.proxyvote.com.

Whether or not you plan to attend the 2012 Annual Meeting, your vote is very important and we encourage you to vote promptly. After reading the Proxy Statement, please promptly mark, sign and date the enclosed proxy card and return it in the prepaid envelope provided. Alternatively, you may vote your shares via a toll-free telephone number or over the Internet. Instructions regarding all three methods of voting are provided on the Proxy Card. If you attend the meeting you will, of course, have the right to revoke the proxy and vote your shares in person.

ORGANOVO HOLDINGS, INC.
6275 Nancy Ridge Dr.
San Diego, California 92121

**PROXY STATEMENT FOR THE 2012 ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON OCTOBER 17, 2012**

GENERAL INFORMATION

The accompanying proxy is solicited by the Board of Directors (the "Board" or "Board of Directors") of Organovo Holdings, Inc., a Delaware corporation (the "Company"), to be voted at the 2012 Annual Meeting of Stockholders (the "Annual Meeting") to be held on October 17, 2012 at the Company's principal executive offices located at 6275 Nancy Ridge Dr., San Diego, California 92121 at 9:00 a.m. (Pacific) and any adjournments or postponements thereof. This Proxy Statement and the accompanying Proxy are being sent to stockholders on or about September 17, 2012. References in this Proxy Statement to "we," "our," and "us" are to Organovo Holdings, Inc.

Record Date

Holders of record of our shares of common stock, our only class of issued and outstanding voting securities, at the close of business on September 7, 2012 (the "Record Date") are entitled to notice of and to vote at the Annual Meeting. On the Record Date, 44,280,355 shares of our common stock were issued and outstanding.

Quorum

The presence, in person or by proxy, of the holders of a majority of the outstanding shares of common stock entitled to vote at the Annual Meeting is necessary to constitute a quorum for the transaction of business at the Annual Meeting. Votes for and against, abstentions and "broker non-votes" will each be counted as present for purposes of determining the presence of a quorum.

Broker Non-Votes

Broker non-votes are shares held by brokers, banks or other nominees who are present in person or represented by proxy at the Annual Meeting, but which are not voted on a particular matter because the broker, bank or nominee did not have discretionary authority with respect to that proposal and they did not receive voting instructions from the beneficial owner. Under the rules that govern brokers, brokers have the discretion to vote on routine matters, but not on non-routine matters. The only routine matter at the Annual Meeting is the ratification of the appointment of the Company's independent registered public accountants. Non-routine matters include the election of directors and the proposal to approve revised performance criteria and the award limitations under the Organovo Holdings, Inc. 2012 Equity Incentive Plan.

Adjournments

The Annual Meeting may be adjourned from time to time and at any reconvened meeting, action with respect to the matters specified in this notice may be taken without further notice to stockholders except as required by applicable law and our charter documents.

Vote Required to Adopt Proposals

Stockholders are entitled to cast one vote per share of common stock on each matter presented for consideration by the stockholders at the Annual Meeting. A list of stockholders entitled to vote at the Annual Meeting will be available for examination by any stockholder for a proper purpose during normal business hours at the principal executive offices of the Company for a period of at least 10 days preceding the date of the Annual Meeting.

For the election of directors, directors are elected by a plurality of the votes cast, which means the director nominee who receives the highest number of “FOR” votes will be elected as a Class I director. You may vote “For”, “Against” or “Abstain” with respect to the director nominee. With respect to each of the other proposals, approval of the proposal requires the affirmative vote of a majority of the votes cast, unless otherwise required by applicable law, rule or regulation or the Company’s charter documents. Broker non-votes and abstentions will not be considered as votes cast for or against a proposal or director nominee unless otherwise indicated herein.

Proxies

All shares represented by a proxy will be voted, and where a stockholder specifies a choice with respect to any matter to be acted upon, the shares will be voted in accordance with the specification so made by the stockholder. If a stockholder does not indicate a choice on the proxy card, the proxy holders will vote the shares in favor of the election of the director nominee listed in this Proxy Statement, in favor of approving the revised performance criteria and the award limitations under the Organovo Holdings, Inc. 2012 Equity Incentive Plan, in favor of ratifying Mayer Hoffman as the Company’s independent registered public accountants for fiscal 2012 and in the discretion of the proxy holders on any other matter that comes before the Annual Meeting.

If your shares are held by a broker, bank or other nominee exercising fiduciary powers (typically referred to as being held in “street name”), you may receive a separate voting instruction form with this Proxy Statement. Your broker may vote your shares on the proposal to ratify our independent auditors, but will not be permitted to vote your shares with respect to the election of directors or the proposal to approve revised performance criteria and the award limitations under the Organovo Holdings, Inc. 2012 Equity Incentive Plan unless you provide instructions as to how to vote your shares. Please note that if your shares are held of record by a broker, bank or nominee and you wish to vote at the meeting, you will not be permitted to vote in person unless you first obtain a proxy issued in your name from the record holder.

Proxy Revocation Procedure

A proxy may be revoked at any time before it has been exercised with regard to any matter (i) by written notice of revocation mailed to and received by the Company’s Corporate Secretary prior to the date of the Annual Meeting, (ii) by executing and delivering to the Corporate Secretary a proxy dated as of a later date than a previously executed and delivered proxy (provided, however, that such action must be taken prior to 6:00 p.m., local time, on October 16, 2012), or (iii) by attending the Annual Meeting and voting in person. Attendance at the Annual Meeting will not in and of itself revoke a proxy.

Solicitation of Proxies

We will bear the entire cost of soliciting proxies. In addition to soliciting stockholders by mail, we will request brokers, banks and other nominees holding shares of our common stock beneficially, to obtain proxies from the beneficial owners and will reimburse them for their reasonable expenses in so doing. We may use the services of our officers, directors and other employees to solicit proxies, personally or by telephone, without additional compensation.

Voting Results

We will announce preliminary voting results at the annual meeting. We will report final results in a Form 8-K report filed with the Securities and Exchange Commission (the “SEC”).

Corporate Background

This is the first Annual Meeting of Organovo Holdings, Inc. since our reverse merger on February 8, 2012. Real Estate Restoration and Rental, Inc. (“RERR”), our predecessor company, was incorporated in 2007 in the state of Nevada. On December 28, 2011, RERR entered into an Agreement and Plan of Merger pursuant to which RERR merged with its newly formed, wholly owned subsidiary, Organovo Holdings, Inc. (“Merger Sub”), a Nevada corporation (the “RERR Merger”). Upon the consummation of the RERR Merger, the separate existence of Merger Sub ceased and RERR, the surviving corporation in the RERR Merger, became known as Organovo Holdings, Inc. (“Holdings-Nevada”). As permitted by Chapter 92A.180 of Nevada Revised Statutes, the sole purpose of the RERR Merger was to effect a change of RERR’s name.

On January 30, 2012, Holdings-Nevada entered into an Agreement and Plan of Merger pursuant to which Holdings-Nevada merged with and into its newly formed, wholly owned subsidiary, Organovo Holdings, Inc. (“Holdings-Delaware”), a Delaware corporation (the “Reincorporation Merger”). Upon the consummation of the Reincorporation Merger, the separate existence of Holdings-Nevada ceased and Holdings-Delaware was the surviving corporation in the Reincorporation Merger. The sole purpose of the Reincorporation Merger was to change the domicile of our predecessor company from Nevada to Delaware.

On February 8, 2012, Organovo Acquisition Corp. (“Acquisition Corp.”), a wholly-owned subsidiary of Holdings-Delaware, merged (the “Merger”) with and into Organovo, Inc., a Delaware corporation (“Organovo”). Organovo was the surviving corporation of that Merger. As a result of the Merger, Holdings-Delaware acquired the business of Organovo, and will continue the existing business operations of Organovo.

Overview

We are committed to maintaining the highest standards of business conduct and corporate governance, which we believe are fundamental to the overall success of our business, serving our stockholders well and maintaining our integrity in the marketplace. Our Corporate Governance Guidelines and Code of Business Conduct, together with our Certificate of Incorporation, Bylaws and charters of our Board Committees, form the basis for our corporate governance framework.

Our Corporate Governance Guidelines (which includes our standard for determining director independence), our Code of Business Conduct (which includes our policies on ethics and compliance), our Board Committee charters and other corporate governance information can be found in the “Investor Relations” section of our website accessible at www.organovo.com. Any stockholder also may request copies of these materials in print, without charge, by contacting our Corporate Secretary at Organovo Holdings, Inc., 6275 Nancy Ridge Dr., San Diego, California 92121.

Corporate Governance Guidelines

Our Corporate Governance Guidelines are designed to ensure effective corporate governance of our Company. Our Corporate Governance Guidelines cover topics including, but not limited to, director qualification criteria, director responsibilities, director compensation, director orientation and continuing education, communications from stockholders to the Board, succession planning and the annual evaluation of the Board and its committees. Our Corporate Governance Guidelines are reviewed regularly by the Nominating and Corporate Governance Committee of our Board and revised when appropriate.

Code of Business Conduct

We have adopted a Code of Business Conduct that applies to all of our directors, officers, and employees, including our principal executive officer and principal financial officer. We intend to review this Code of Business Conduct on an annual basis and modify it as appropriate. A copy of our Code of Business Conduct, and any amendments to this code, or any waivers of its requirements, is located on our website at www.organovo.com, as permitted under SEC rules and regulations. We will disclose within four business days any substantive changes in or waivers of the Code of Business Conduct granted to our principal executive officer, principal financial officer, principal accounting officer, or controller, or persons performing similar functions, by posting such information on our website as set forth above rather than by filing a Form 8-K with the SEC.

Attendance at Meetings

No meetings of our Board of Directors or any committee thereof took place prior to our reverse merger. Since our reverse merger in February 2012, each director has attended, in person or by telephone, at least 75% of the total number of meetings of both the Board of Directors and Board Committees on which such director serves. Board members are expected to attend the Annual Meeting.

Board Composition

Our Board of Directors is authorized to have five members. There are no family relationships among any of our directors and executive officers. Our Board of Directors is comprised of three classes, as follows:

- Class I, whose member is Keith Murphy. The term of the Class I director expires at the Annual Meeting;
- Class II, whose members are Andras Forgacs and Adam Stern. The terms of the Class II directors expire at our 2013 Annual Meeting of Stockholders; and
- Class III, whose members are Robert Baltera Jr. and James Glover. The terms of the Class III directors expire at our 2014 Annual Meeting of Stockholders.

At each annual meeting of stockholders, the successors to directors whose terms then expire will serve until the third annual meeting following their election and until their successors are elected and qualified. The authorized number of directors may be changed only by resolution of our Board of Directors. Any additional directorships resulting from an increase in the number of directors will be distributed between the three classes so that, as nearly as possible, each class will consist of one-third of the total number of directors. Our directors will hold office until their successors have been elected and qualified or until their earlier death, resignation, disqualification or removal for cause by stockholders in accordance with our Bylaws.

Board of Directors Leadership Structure

Our Board of Directors believes that Mr. Murphy's service as both Chairman of the Board and Chief Executive Officer is in the best interests of the Company and its stockholders at this time. Mr. Murphy possesses detailed and in-depth knowledge of our technology and the issues, opportunities and challenges we face as a company. The Board determined that he is the person best positioned to develop agendas that ensure that our Board's time and attention are focused on the most critical matters. Our Board also determined that his combined role enables decisive leadership, ensures clear accountability and enhances our ability to communicate our message and strategy clearly and consistently to stockholders, employees, customers and research partners. Each of the Board Committees are comprised entirely of independent directors, and our Board believes that these Board Committees provide effective oversight of our executive officers. Although our Board currently believes that the combination of the Chairman and Chief Executive Officer roles is appropriate in the current circumstances, our Bylaws and Corporate Governance Guidelines provide our Board with the flexibility to separate the positions of Chairman of the Board and Chief Executive Officer. While we do not currently intend to separate these positions, a change in leadership structure would be made if our Board determines it is in the best long-term interests of the Company and its stockholders.

Executive Sessions of Independent Directors

The independent directors of the Board will meet in executive session at least three times each year. The Presiding Director will chair these meetings, or if no Presiding Director has been selected by the independent directors, then an independent director will be selected at the beginning of each executive session to preside over the meeting.

Board's Role in Risk Oversight

The Board of Directors is responsible for overseeing our risk management. To assist its oversight function, the Board has delegated many risk oversight functions to the Audit Committee. Under its charter, the Audit Committee is responsible for providing advice to the Board with respect to our risk evaluation and mitigation processes, including, in particular, the processes utilized by management for identifying, evaluating, and mitigating strategic, financial, operational, regulatory, and external risks inherent in our business. In addition to the Audit Committee's work in overseeing risk management, our full Board regularly engages in discussions of the most significant risks that we face and how these risks are being managed.

Our executive officers provide our Board and its committees with regular updates about our strategies and objectives and the risks inherent within them at Board and Committee meetings. Board and Committee meetings also provide a venue for directors to discuss issues of concern with management. Our Board of Directors and Committees can call special meetings when necessary to address specific issues or matters that should be addressed before the next regularly scheduled meeting. In addition, our directors have access to our management at all levels to discuss any matters of interest, including those related to risk. Those members of management most knowledgeable of the issues attend Board meetings to provide additional insight into items being discussed, including risk exposures. Our Board believes that the work undertaken by the Audit Committee, together with the work of the full Board, the President and the Chief Executive Officer, enables the Board to effectively oversee our risk management function.

Stockholder Recommendations for Director Nominees

In nominating candidates for election as a director, the Nominating and Corporate Governance Committee will consider a reasonable number of candidates recommended by a single stockholder who has held over 0.1% of our common stock for over one year and who satisfies the notice, information and consent provisions set forth in our Bylaws and Corporate Governance Guidelines. Stockholders who wish to recommend a candidate may do so by writing to the Nominating and Corporate Governance Committee in care of the Corporate Secretary, Organovo Holdings, Inc., 6275 Nancy Ridge Dr., San Diego, California 92121. The Nominating and Corporate Governance Committee will use the same evaluation process for director nominees recommended by stockholders as it uses for other director nominees. A printed copy of our Bylaws and Corporate Governance Guidelines may be obtained by any stockholder upon request to our Corporate Secretary.

Identification and Evaluation of Director Nominees

Our Nominating and Corporate Governance Committee uses a variety of methods for identifying and evaluating director nominees. Our Nominating and Corporate Governance Committee regularly assesses the appropriate size and composition of the Board, the needs of the Board and the respective Board Committees, and the qualifications of candidates in light of these needs. Candidates may come to the attention of the Nominating and Corporate Governance Committee through stockholders, management, current members of the Board, or search firms. The evaluation of these candidates may be based solely upon information provided to the Nominating and Corporate Governance Committee or may also include discussions with persons familiar with the candidate, an interview of the candidate or other actions the Nominating and Corporate Governance Committee deems appropriate, including the use of third parties to review candidates.

While we do not have a stand-alone diversity policy, in considering whether to recommend any director nominee, including candidates recommended by stockholders, we believe that the backgrounds and qualifications of our directors, considered as a group, should provide a significant mix of experience, knowledge and abilities that will allow our Board and its Committees to fulfill their respective responsibilities. As set forth in our Corporate Governance Guidelines, these criteria generally include, among other things, an individual's business experience and skills (including skills in core areas such as operations, management, technology, accounting and finance, strategic planning and international markets), as well as independence, judgment, knowledge of our business and industry, professional reputation, leadership, integrity and ability to represent the best interests of the Company's stockholders. In addition, the Nominating and Corporate Governance Committee will also consider the ability to commit sufficient time and attention to the activities of the Board, as well as the absence of any potential conflicts with the Company's interests. The Nominating and Corporate Governance Committee does not assign specific weights to particular criteria and no particular criterion is necessarily applicable to all prospective director nominees. Our Board will be responsible for selecting candidates for election as directors based on the recommendation of the Nominating and Corporate Governance Committee.

We believe that our current Board includes individuals with a strong background in executive leadership and management, accounting and finance, fundraising, and Company and industry knowledge. In addition, each of our directors has a strong professional reputation and has shown a dedication to his profession and community. We also believe that our directors' diversity of backgrounds and experiences results in different perspectives, ideas, and viewpoints, which make our Board more effective in carrying out its duties. We believe that our directors hold themselves to the highest standards of integrity and that they are committed to representing the long-term interests of our stockholders.

The Nominating and Corporate Governance Committee and the Board believe that each of the director nominees for election at the annual meeting brings a strong and unique set of qualifications, attributes and skills and provides the Board as a whole with an optimal balance of experience, leadership and competencies in areas of importance to our Company. Under "Proposal One—Election of Directors," we provide an overview of each directors principal occupation, business experience and other directorships, together with other key attributes that we believe provide value to the Board, the Company and its stockholders.

Director Independence

The Board has adopted the definition of director independence set forth in the listing standards of the Nasdaq Stock Market for its standard to assist it in making its determination of director independence. The Board assesses on a regular basis, and at least annually, the independence of our directors and, based on the recommendation of the Nominating and Corporate Governance Committee, makes a determination as to which directors are independent.

The Board has determined that the following directors, are independent under our Corporate Governance Guidelines: Messrs. Baltera and Glover. In making this determination, our Board of Directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our Board of Directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director.

Board Committees

Our Board of Directors has established the following committees: an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. The composition and responsibilities of each committee are described below. Directors serve on these committees until their resignation or until otherwise determined by our Board of Directors.

Membership of the Committees of the Board

	<u>Audit</u>	<u>Compensation</u>	<u>Nominating and Corporate Governance</u>
Robert Baltera Jr.	X	X	Chair
James Glover	Chair	Chair	X

Audit Committee. Our Audit Committee oversees our corporate accounting and financial reporting process. The responsibilities of our Audit Committee include, among other things:

- appointing our independent registered public accounting firm and determining the funding for audit and review by them of our consolidated financial statements and any permissible non-audit services;
- evaluating and overseeing our independent registered public accounting firm's independence and performance;
- reviewing our annual and quarterly consolidated financial statements and reporting and discussing the financial statements and reports with our independent auditors and management;
- approving the disclosures in and filing of our periodic reports on Form 10-K and Form 10-Q to be filed with the SEC;
- reviewing with our independent auditors and management any significant issues that arise regarding accounting principles and financial statement presentation, and matters concerning the scope, adequacy and effectiveness of our internal controls and disclosure controls and procedures;
- establishing procedures for the receipt, retention and treatment of complaints received by us regarding internal controls, accounting or auditing matters;
- establishing procedures for the confidential, anonymous submissions by employees regarding accounting, internal controls or accounting matters;
- reviewing and, if appropriate, approving proposed related party transactions; and
- developing, reviewing and amending our Code of Business Conduct.

Both our independent auditors and management periodically meet separately with our Audit Committee. A copy of our Audit Committee charter is available on our website www.organovo.com.

The current members of our Audit Committee are Messrs. Glover and Baltera. Mr. Glover serves as chairman of the Audit Committee. Our Board of Directors has determined that all of the members of our Audit Committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC. Our Board of Directors has determined that each member of our Audit Committee is an Audit Committee financial expert as defined under the applicable rules of the SEC. Our Board of Directors has determined that all of the members of our Audit Committee are independent directors as defined under the applicable rules and regulations of the SEC and the Corporate Governance Guidelines.

Compensation Committee. Our Compensation Committee adopts and administers the compensation policies, plans and benefit programs for our executive officers and all other members of our executive team. The responsibilities of this committee include, among other things:

- determining the compensation and other terms of employment of our executive officers and senior management, and reviewing and approving corporate performance goals and objectives relevant to such compensation;
- recommending to our Board of Directors the type and amount of compensation to be paid or awarded to members of our Board of Directors;
- evaluating and recommending to our Board of Directors the equity incentive plans, compensation plans and similar programs advisable for us, as well as modification or termination of existing plans and programs;
- administering the issuance of stock options and other equity incentive arrangements under our equity incentive plans;
- establishing policies with respect to equity compensation arrangements; and
- reviewing and approving the terms of employment agreements, severance arrangements, change-in-control protections and any other compensatory arrangements for our executive officers and senior management.

Our Compensation Committee with the input of senior management evaluates potential risks related to our compensation policies and practices for employees and has determined that we have no compensation risks that are reasonably likely to have a material adverse effect on our company. We structure our compensation to address company-wide risk. This is accomplished in part by tying compensation to corporate goals and individual performance goals. These goals can be adjusted annually to address risks identified in the annual risk assessment. We also use a mix of different compensation elements to balance short-term awards versus long-term awards to align compensation with our business strategy and stockholders' interests. We believe the combination of base salary, performance-based cash awards and stock-based incentive awards with multi-year vesting periods is balanced and serves to motivate our employees to accomplish our business plan without creating risks that are reasonably likely to have a material adverse effect on our company. We have adopted a Compensation Committee charter, a copy of which is available on our website at www.organovo.com.

The current members of our Compensation Committee are Messrs. Glover and Baltera. Mr. Glover serves as the chairman of the Compensation Committee. Our Board of Directors has determined that all of the members of our Compensation Committee are independent directors under the applicable rules and regulations of the SEC and our Corporate Governance Guidelines.

Nominating and Corporate Governance Committee. Our Nominating and Corporate Governance Committee is responsible for, among other things, making recommendations regarding corporate governance, the composition of our Board of Directors, identification, evaluation and nomination of director candidates and the structure and composition of committees of our Board of Directors.

The responsibilities of this committee include, among other things:

- developing and maintaining a current list of the functional needs and qualifications of members of our Board of Directors;
- evaluating director performance on the Board of Directors and applicable committees of the Board of Directors and determining whether continued service on our Board of Directors is appropriate;
- interviewing, evaluating, nominating and recommending individuals for membership on our Board of Directors;
- evaluating stockholder nominations of candidates for election to our Board of Directors;
- developing, reviewing and amending a set of corporate governance policies and principles;
- considering questions of possible conflicts of interest of directors as such questions arise; and
- recommending to our Board of Directors the establishment of such special committees as may be desirable or necessary from time to time in order to address ethical, legal, business or other matters that may arise.

A copy of our Nominating and Corporate Governance Committee charter is available on our website www.ogranovo.com.

The current members of our Nominating and Corporate Governance Committee are Messrs. Baltera and Glover. Mr. Baltera serves as the chairman of the committee. Our Board of Directors has determined that all of the members of our Nominating and Corporate Governance Committee are independent directors under the applicable rules and Corporate Governance Guidelines.

Compensation Committee Interlocks and Insider Participation

No member of our Compensation Committee is or has at any time during the past year been one of our officers or employees. None of our executive officers currently serves or in the past year has served as a member of the Board of Directors or Compensation Committee of any entity that has one or more executive officers serving on our Board of Directors or Compensation Committee.

Communicating with the Board

Our Corporate Governance Guidelines establish procedures by which stockholders and other interested parties may communicate with the Board, any Committee of the Board, any individual director (including the Presiding Director) or the independent non-employee directors as a group. Such parties can send communications by mail to the Board in care of the Corporate Secretary, 6275 Nancy Ridge Dr., San Diego, California 92121. The name or title of any specific recipient or group should be noted in the communication. Communications from stockholders are distributed by the Corporate Secretary to the Board or to the Committee or director(s) to whom the communication is addressed, however the Corporate Secretary will not distribute items that are unrelated to the duties and responsibilities of the Board, such as spam, junk mail and mass mailings, business solicitations and advertisements, and communications that advocate the Company's engaging in illegal activities or that, under community standards, contain offensive, scurrilous or abusive content.

Compensation Consultant

In the last fiscal year, the Compensation Committee has selected and retained Compensia, Inc. as independent executive compensation consultants. Compensia provides compensation consulting services to the Compensation Committee, reports directly to the Compensation Committee, only provides services that are requested by the Compensation Committee and works with the Company's management only on matters for which the Compensation Committee is responsible.

Policy on Stock Hedging

All directors and executive officers are prohibited from engaging in short-term or speculative transactions involving our securities, such as publicly traded options, short sales, puts and calls, and hedging transactions.

PROPOSAL ONE
ELECTION OF DIRECTORS

We have a classified Board of Directors consisting of one (1) Class I director, two (2) Class II directors and two (2) Class III directors. At each annual meeting of stockholders, directors are elected for a term of three (3) years to succeed those directors whose terms expire at the annual meeting dates. At the 2012 Annual Meeting, our stockholders will be asked to elect one director nominated for election as a Class I director. Upon recommendation of our Nominating and Corporate Governance Committee, our Board unanimously nominated Keith Murphy, our current Chief Executive Officer and President and the current Class I director, for re-election as a Class I director.

The following table lists the Board nominee for election as a Class I director, as well as the Class II and Class III directors who are continuing to serve, together with information as of September 7, 2012 regarding each director's principal occupation, business experience and other directorships, together with the qualifications, attributes and skills that led our Board to the conclusion that each of our directors should serve as a director. As discussed above, we believe that our current Board includes individuals with a strong background in executive leadership and management, accounting and finance, fundraising, and Company and industry knowledge. In addition, each of our directors has a strong professional reputation and has shown a dedication to his profession and community. We also believe that our directors' diversity of backgrounds and experiences results in different perspectives, ideas, and viewpoints, which make our Board more effective in carrying out its duties. We believe that our directors hold themselves to the highest standards of integrity and that they are committed to representing the long-term interests of our stockholders.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Keith Murphy (Class I)	40	Chairman of the Board, Chief Executive Officer and President
Robert Baltera Jr. (Class III)	46	Director
Andras Forgacs (Class II)	35	Director
James Glover (Class III)	62	Director
Adam Stern (Class II)	47	Director

Keith Murphy, Chairman of the Board, Chief Executive Officer, and President, joined us in February 2012. Mr. Murphy is one of the founders of Organovo, Inc. and served as its President and Director since July 2007. Mr. Murphy was formerly an employee of biotechnology company Alkermes, Inc., where he worked from July, 1993 to July, 1997 and played a role on the development team for their first approved product, Nutropin (hGH) Depot. He moved to Amgen, Inc. in August, 1997 and developed several other novel formulation and device products. He has over 18 years of experience in biotechnology, including serving in Product Strategy and Director of Process Development roles at Amgen through July, 2007. He was previously Global Operations Leader for the largest development program in Amgen's history, osteoporosis/bone cancer drug Prolia/Xgeva (denosumab). He holds a BS in Chemical Engineering from MIT, and is an alumnus of the UCLA Anderson School of Management.

Mr. Murphy's previous experience in the biotechnology field and his educational experience qualify him to be a member of our Board of Directors.

Robert Baltera, Jr., Director, joined us as a director in February 2012. Mr. Baltera served as a director of Organovo, Inc. since October, 2009. Most recently, Mr. Baltera was the Chief Executive Officer of Amira Pharmaceuticals, a position he held from July, 2007 through September, 2011. Amira was sold to Bristol-Myers Squibb in September, 2011 for \$325 million in cash upfront, plus additional milestone payments of up to \$150 million. Mr. Baltera is a seasoned pharmaceutical industry executive who has acquired a wealth of business and product management experience during his 17 years with biotech pioneer Amgen, beginning November, 1990. In his role leading Amira Pharmaceuticals, he was instrumental in focusing the company's development efforts, strengthening and developing its pipeline and forging key collaborations with partners such as

GlaxoSmithKline. Before becoming Amira's CEO, he held a number of senior management positions at Amgen, the last being vice president of corporate and contract manufacturing. He served as Amgen's team leader responsible for the approval of Kineret™ in rheumatoid arthritis. Mr. Baltera currently serves on the Board of Trustees of the Keck Graduate Institute (KGI) of Applied Life Sciences. Mr. Baltera has an MBA from the Anderson School at UCLA and earned his bachelor's degree in microbiology and a master's degree in genetics from The Pennsylvania State University.

Mr. Baltera's previous experience in the biotechnology field and his educational experience qualify him to be a member of our Board of Directors.

Andras Forgacs, Director, joined us as a director in February 2012. Mr. Forgacs is one of the founders of Organovo, Inc. and served as a director of it since April, 2007. Mr. Forgacs has served as the Chief Executive Officer of Modern Meadow, Inc. since August 2011, a company focused on exploring the use of tissue engineering technologies to produce high value, food grade animal protein and leather without the need to raise, slaughter and transport livestock. Mr. Forgacs previously served as the Managing Director of Richmond Global, an international technology-focused venture fund, from July 2008 to December 2011, where he currently maintains a role as Venture Partner. Prior to joining Richmond, beginning in November, 2005, he was a consultant in the New York office of McKinsey & Company advising healthcare/pharmaceutical companies and private equity/venture capital firms. Mr. Forgacs began his career with Citigroup as an investment banker in the Financial Strategy Group in July 1999. Mr. Forgacs is a Kauffman Fellow with the Center for Venture Education and a Term Member with the Council on Foreign Relations. He holds an MBA from the Wharton School of Business and a Bachelor of Arts with honors from Harvard University. Mr. Forgacs is the son of Dr. Gabor Forgacs, the scientific founder of Organovo, Inc.

Mr. Forgacs' experience with emerging technology companies in the venture capital field, his background in consulting to the bio-pharmaceutical industry and his educational experience qualify him to be a member of our Board of Directors.

James Glover, Director, joined us as a director in July 2012. Mr. Glover was the Senior Vice President, Operations and Chief Financial Officer of Anadys Pharmaceuticals, Inc., a publicly-traded biopharmaceutical company acquired by Hoffmann-La Roche Inc., from 2006 to 2009. From 1989 to 2006, he was employed by Beckman Coulter, Inc., a public biomedical testing instruments company, most recently serving as Senior Vice President and Chief Financial Officer. Mr. Glover served as a director of Varian, Inc., a publicly-traded company purchased by Agilent Technologies, and was Varian's audit committee chairman. He currently serves as a director for a non-profit corporation. Mr. Glover received his B.S. in accounting from California State Polytechnic University and his M.B.A. from Pepperdine University. Mr. Glover, age 62, is also a certified public accountant.

Mr. Glover's previous executive officer and Board member experience, including his accounting and financial reporting experience, qualify him to be a member of our Board of Directors.

Adam Stern, Director, Senior Managing Director of Spencer Trask Ventures, joined us as a director in February 2012. Mr. Stern 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 Ventures, Inc. Mr. Stern joined Spencer Trask Ventures 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 currently sits on the boards of various private companies and one public company, InVivo Therapeutics Holdings Corp. (OTCBB:NVIV). Mr. Stern holds a Bachelor of Arts degree with honors from The University of South Florida in Tampa.

Mr. Stern's experience as a board member of privately held and publicly traded companies qualifies him to be a member of our Board of Directors. Additionally, his 20 years of venture capital and investment banking focusing on technology and life science sectors will be an asset to the Board of the Directors if we attempt to raise capital in the future.

Vote Required and Board Recommendation

Directors are elected by a plurality of the votes cast at the Annual Meeting, which means that the director nominee receiving the highest number of "FOR" votes will be elected as a Class I director. Votes to "Abstain" and broker non-votes are not counted as votes cast with respect to that director, and will have no direct effect on the outcome of the election of directors. All of the director nominees have indicated their willingness to serve if elected, but if any should be unable or unwilling to stand for election, the shares represented by proxies may be voted for a substitute as the Board may designate, unless a contrary instruction is indicated in the proxy.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE "FOR" KEITH MURPHY AS A CLASS I DIRECTOR.

PROPOSAL TWO
APPROVAL OF REVISED PERFORMANCE CRITERIA AND THE
AWARD LIMITATIONS UNDER THE ORGANOVO HOLDINGS, INC.
2012 EQUITY INCENTIVE PLAN

The Board of Directors is asking the stockholders of the Company to approve revised performance criteria and existing award limitations that would apply to performance awards granted under the Organovo Holdings, Inc. 2012 Equity Incentive Plan (the “2012 Plan”). Stockholders are not being asked to approve an increase in the number of shares issuable under the 2012 Plan or any other amendment, other than the revised performance criteria.

Stockholder approval of the performance criteria and the maximum award amount is required for the Company to fully deduct the amount or value of the performance awards, as permitted under Section 162(m) of the Internal Revenue Code of 1986, as amended (the “Code”). Section 162(m) of the Code generally limits to \$1 million the deduction available to public companies for compensation paid to its chief executive officer and the other three highest compensated officers (other than the chief financial officer) as of the end of its fiscal year (for purposes of Section 162(m), these individuals are referred to as “covered employees”). This \$1 million deduction limit does not apply, however, to “performance-based compensation” as defined under Section 162(m) of the Code.

Performance awards granted under the 2012 Plan are intended to be eligible to qualify as performance-based compensation that would be fully deductible under Section 162(m) of the Code. To so qualify, a performance award must be subject to performance criteria established by a committee or subcommittee comprised solely of two or more outside directors of the Company (the “Committee”). In addition, the performance criteria must be disclosed to and approved by stockholders of the Company. If stockholder approval of the revised performance criteria is not obtained, performance awards granted under the 2012 Plan will be subject to the \$1 million deduction limit, which may result in additional cost to the Company to the extent amounts of compensation paid to covered officers are not deductible.

Performance Criteria Under the 2012 Plan

Performance awards may be granted under the 2012 Plan to covered employees and other employees, directors and consultants of the Company or any parent, subsidiary or affiliate of the Company. Performance awards may be in the form of performance shares or performance units, which may be denominated or settled in cash, shares of stock (either fully vested or subject to vesting), or a combination thereof. If a performance award is intended to qualify as performance-based compensation under Section 162(m) of the Code, the award must specify a predetermined amount of cash or shares that may be earned by the covered employee to the extent that one or more of the following predetermined performance criteria are attained within a predetermined performance period: (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; (xi) return on capital, including but not limited to return on invested capital against a weighted average cost of capital; (xii) return on net assets; (xiii) economic value added; (xiv) market share; (xv) customer service; (xvi) customer satisfaction; (xvii) safety; (xviii) total stockholder return; (xix) free cash flow; (xx) net operating income; (xxi) operating cash flow; (xxii) return on investment; (xxiii) employee satisfaction; (xxiv) employee retention; (xxv) balance of cash, cash equivalents and marketable securities; (xxvi) product development; (xxvii) research and development expenses; (xxviii) completion of an identified special project; (xxix) completion of a joint venture or other corporate transaction; (xxx) filing of patents; (xxxii) submission and/or publication of Scientific Works; (xxxii) execution or expansion of strategic partnerships or relationships; or (xxxiii) such other measures as determined by the Committee consistent with the terms of the 2012 Plan.

Performance criteria may be expressed on an absolute basis or relative to a standard specified by the Committee. Performance criteria have the same meanings as used in the Company’s financial statements, or, if such terms are not used in the Company’s financial statements, they shall have the meaning applied pursuant to generally

accepted accounting principles, or as used generally in the Company's industry. Performance criteria are calculated with respect to the Company and each subsidiary corporation consolidated therewith for financial reporting purposes or such division or other business unit as may be selected by the Committee. For purposes of the 2012 Plan, the performance criteria applicable to a performance award is calculated in accordance with generally accepted accounting principles, but prior to the accrual or payment of any performance award for the same performance period and excluding the effect (whether positive or negative) of any change in accounting standards or any extraordinary, unusual or nonrecurring item, as determined by the Committee, occurring after the establishment of the performance criteria applicable to the performance award. Each such adjustment, if any, is made solely for the purpose of providing a consistent basis from period to period for the calculation of performance criteria in order to prevent the dilution or enlargement of a covered employee's rights with respect to a performance award.

In order to permit awards to qualify as performance-based compensation under Section 162(m) of the Code, no employee may be granted awards under the 2012 Plan in excess of 2,000,000 Shares or \$2,000,000 in each calendar year.

In the event of any stock dividend, stock split, reverse stock split, recapitalization, combination, reclassification or similar change in the capital structure of the Company, appropriate adjustments will be made in the per-employee grant limits specified above.

The above summary of the material terms of the performance criteria under the Plan is qualified in its entirety by the specific language of the 2012 Plan, which is included as Appendix A to this proxy statement and which is available to any stockholder upon request.

Vote Required and Board Recommendation

If a quorum is present, approval of the proposal requires the affirmative vote of a majority of the votes cast. Abstentions and "broker non-votes" will each be counted as present for purposes of determining the presence of a quorum. Broker non-votes will not be considered as votes cast for or against the proposal and will therefore have no effect on the outcome of the vote. Abstentions will be counted as a vote cast; and is treated as a vote against the proposal.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" APPROVAL
OF REVISED PERFORMANCE CRITERIA AND THE AWARD LIMITATIONS UNDER THE
ORGANOVO HOLDINGS, INC. 2012 EQUITY INCENTIVE PLAN**

PROPOSAL THREE

RATIFICATION OF APPOINTMENT OF MAYER HOFFMAN LLP AS THE INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE COMPANY

Mayer Hoffman McCann P.C. has served as our independent registered public accounting firm since February 2012. Our Audit Committee is responsible for approving the engagement of Mayer Hoffman as the Company's independent registered public accounting firm for the year ending December 31, 2012.

The Audit Committee has and intends to continue to meet with Mayer Hoffman in 2012 on a quarterly or more frequent basis. At such times, the Audit Committee will review the services performed by Mayer Hoffman, as well as the fees charged for such services.

A representative of Mayer Hoffman is expected to be present at the Annual Meeting and will have an opportunity to make a statement if he or she desires. The representative is also expected to be available to respond to appropriate questions from stockholders.

Fees Billed to the Company by its independent auditors during Fiscal Years 2011 and 2010.

Set forth below is certain information concerning fees billed to us by Webb & Company, P.A. in respect of services provided in 2011 and 2010.

	<u>2011</u>	<u>2010</u>
Audit fees	\$ 8,600	\$2,300
Audit-related fees	\$ 4,700	—
Tax Fees	—	—
All other fees	—	—
Total	<u>\$13,300</u>	<u>\$2,300</u>

Audit Fees: For the years ended December 31, 2011 and 2010, the aggregate audit fees billed by independent auditors were for professional services rendered for audits and quarterly reviews of our consolidated financial statements, and assistance with reviews of registration statements and documents filed with the SEC.

Audit-Related Fees: For the year ended December 31, 2011, the audit related fees billed by Webb & Company, P.A. pertained to services rendered in connection with (i) the audit of our Schedule of Expenditures for the National Institutes of Health Research and Development Program, and (ii) procedures required for filings with the SEC in conjunction with financing transactions. For the year ended December 31, 2010, there were no fees billed by our independent auditors for services related to audit-related fees.

Tax Fees: For the years ended December 31, 2011 and 2010, there were no fees billed by our independent auditors for services related to tax return preparation and tax planning services.

All Other Fees: For the years ended December 31, 2011 and 2010, there were no fees billed by our independent auditors for other services, other than the fees described above.

Policy on Audit Committee pre-approval of audit and permitted non-audit services of independent auditors

The Audit Committee has determined that all services provided by Mayer Hoffman to date are compatible with maintaining the independence of such audit firm. The charter of the Audit Committee requires advance approval of all auditing services and permitted non-audit services (including the fees and terms thereof) to be performed for the company by our independent registered public accounting firm, subject to any exception permitted by law or regulation. The Audit Committee has delegated to the Chair of the Audit Committee authority to approve permitted services, provided that the Chair reports any decisions to the Audit Committee at its next scheduled meeting.

Interest of Certain Persons in Matters to be Acted Upon

There are no persons who have a direct or indirect substantial interest in the matter described under Proposal Three above.

Vote Required and Board Recommendation

If a quorum is present, ratification of the independent public accountants requires the affirmative vote of a majority of the votes cast. Abstentions and “broker non-votes” will each be counted as present for purposes of determining the presence of a quorum, but will not be considered as votes cast for or against the proposal and will therefore have no effect on the outcome of the vote.

Submission of the appointment to stockholder approval is not required. However, the Audit Committee will reconsider the appointment if it is not approved by stockholders.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE RATIFICATION OF MAYER HOFFMAN LLP AS INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE COMPANY FOR THE FISCAL YEAR ENDING DECEMBER 31, 2012.

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

The following is the report of the Audit Committee of the Board of Directors of Organovo Holdings, Inc. with respect to Organovo Holdings’s audited financial statements for the fiscal year ended December 31, 2011, included in the Company’s Current Report on Form 8-K/A filed with the SEC on May 11, 2012. The information contained in this report shall not be deemed to be “soliciting material” or to be “filed” with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that the Company specifically incorporates it by reference in such filing.

The Audit Committee oversees our financial reporting process on behalf of the Board of Directors. Management has the responsibility for the financial statements and the reporting process, including internal control systems. Our independent registered public accounting firm, Mayer Hoffman McCann P.C. (“Mayer Hoffman”), is responsible for expressing an opinion as to the conformity of our audited financial statements with generally accepted accounting principles.

Review with Management

The Audit Committee reviewed and discussed the audited financial statements with management of the Company.

Review and Discussions with Independent Accountants

The Audit Committee met with Mayer Hoffman to review the financial statements for the fiscal year ended December 31, 2011. The Audit Committee discussed with a representative of Mayer Hoffman the matters required to be discussed by Statement of Auditing Standards No. 61, as amended (AICPA, Professional Standards, Vol. 1, AU Section 380), as adopted by the Public Company Accounting Oversight Board in Rule 3200T. In addition, the Audit Committee met with Mayer Hoffman, with and without management present, to discuss the overall scope of Mayer Hoffman’s audit, the results of its examinations and the overall quality of the Company’s financial reporting. The Audit Committee received the written disclosures and the letter from Mayer Hoffman required by Independence Standards Board Standard No. 1, *Independence Discussions with Audit Committees*, and has discussed with Mayer Hoffman its independence, and satisfied itself as to the independence of Mayer Hoffman.

Conclusion

Based on the above review, discussions, and representations received, the Audit Committee recommended to the Board of Directors that the audited financial statements for the fiscal year ended December 31, 2011 be included in the Company's Current Report on Form 8-K/A filed with the SEC on May 11, 2012.

The Audit Committee of the Board of Directors:

James Glover (Chair)

Robert Baltera, Jr.

EXECUTIVE COMPENSATION

The following table sets forth information regarding each element of compensation that we paid or awarded to our named executive officers and for the fiscal years ended December 31, 2011 and 2010.

Summary Compensation Table

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary</u>	<u>Option Awards (\$)</u>	<u>Deferred Compensation (\$)</u>	<u>All Other Compensation (\$)</u>	<u>Total Compensation (\$)</u>
Keith Murphy Chairman, Chief Executive Officer, and President	2011	\$ 217,711	—	—	— ⁽¹⁾	\$ 217,711
	2010	\$ 46,538	—	\$ 63,462 ⁽²⁾	— ⁽³⁾	\$ 110,000
Barry D. Michaels, Chief Financial Officer	2011	\$ 74,315	—	—	— ⁽⁴⁾	\$ 74,315
Sharon Presnell, Executive Vice-President of Research and Development	2011	\$ 157,385	\$ 3,163	—	— ⁽⁵⁾	\$ 160,548

- (1) Excludes payments made for the reimbursement of medical insurance premiums and a personal computer used primarily for business in the aggregate of less than \$10,000.
- (2) Base salary earned, but payment deferred to future periods.
- (3) Excludes payments made for the reimbursement of medical insurance premiums.
- (4) Excludes payments made for the reimbursement of medical insurance premiums in the aggregate of less than \$10,000.
- (5) Excludes payments made for the reimbursement of medical insurance premiums in the aggregate of less than \$10,000. Also excludes \$24,681 in reimbursed relocation expenses that qualify under IRS guidelines as excludable from income.

Employment Arrangements with Officers and Directors

Keith Murphy, one of our founders, has served as our President and Chief Executive Office since July, 2007. The terms of Mr. Murphy's employment agreement, dated February 28, 2012, calls for him to receive a base salary of \$302,500 per year. The term of the employment agreement expires after one year from the effective date, and automatically renews thereafter, unless we provide Mr. Murphy advanced notice of nonrenewal. Mr. Murphy is also eligible to participate in our annual bonus plan and other short-term incentive compensation plans established for our senior executives by our Board of Directors or the Compensation Committee. Mr. Murphy is also entitled to participate in our equity incentive awards plans.

Sharon Presnell became our Executive Vice President of Research and Development in May, 2011. The terms of Dr. Presnell's employment arrangement call for her to receive a base salary of \$248,014 per year. Dr. Presnell is also eligible to receive an annual bonus, which is targeted at 30% of her base salary but which may be adjusted based on her individual performance and our performance as a whole. If we terminate Dr. Presnell's employment without cause, we are required to pay her a severance of up to six months of her base salary (in effect immediately prior to the date of the termination of her employment) plus benefits. Dr. Presnell is also entitled to participate in our equity incentive awards plans.

Barry Michaels became our Chief Financial Officer in August, 2011. The terms of Mr. Michaels' employment arrangement call for him to receive a base salary of \$230,022 per year. Mr. Michaels is also eligible to receive a bonus based on our and his attainment of certain goals and performance milestones. If we terminate Mr. Michaels' employment without cause we are required to pay Mr. Michaels a severance of up to six months of his base salary (in effect immediately prior to the date of the termination of his employment) plus benefits. Mr. Michaels is also entitled to participate in our equity incentive awards plans.

Outstanding Equity Awards at Fiscal Year End

The following table summarizes the equity awards made to our named executive officers that were outstanding at December 31, 2011.

Name	No. of Securities Underlying Unexercised Options (#) Exercisable	No. of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price	Option Expiration Date	Number of shares or Units of stock that have not vested (#)	Market Value of shares or Units of stock that have not vested (\$)
Keith Murphy ⁽¹⁾	—	—	—	—	367,947	\$ 57,422
Sharon Presnell ⁽²⁾	—	896,256	\$ 0.08	5/2021	—	—
Barry Michaels	—	—	—	—	—	—

(1) These shares vested in February 2012.

(2) The options were granted on October 14, 2011, and vest in equal installments over four years from May 2011.

2012 Equity Incentive Plan

Our Board of Directors and stockholders adopted the 2012 Equity Incentive Plan (the "2012 Plan") in January 2012. 6,553,986 shares of Common Stock are reserved for issuance under the 2012 Plan. If an incentive award granted under the 2012 Plan expires, terminates, is unexercised or is forfeited, or if any shares are surrendered to us in connection with an incentive award, the shares subject to such award and the surrendered shares will become available for further awards under the 2012 Plan. Additionally, shares used to pay the tax or exercise price of an award will become available for future grant or sale under the 2012 Plan. To the extent an award under the 2012 Plan is paid out in cash rather than shares, the cash payment will not result in reducing the number of shares available for issuance under the 2012 Plan. The maximum number of shares subject to awards that may be granted to any individual during any calendar year is 2,000,000 and the maximum aggregate amount of cash that may be paid in cash during any calendar year with respect to awards payable in cash is \$2,000,000.

The number and class of shares of our Common Stock subject to the 2012 Plan, the number and class of shares subject to any numerical limit in the 2012 Plan, and the number, price and class of shares subject to awards will be adjusted in the event of any change in our outstanding Common Stock by reason of any stock dividend, spin-off, split-up, stock split, reverse stock split, recapitalization, reclassification, merger, consolidation, liquidation, business combination or exchange of shares or similar transaction.

Administration

It is expected that the compensation committee of the Board, or the Board in the absence of such a committee, will administer the 2012 Plan. Subject to the terms of the 2012 Plan, the compensation committee would have complete authority and discretion to determine the terms of awards under the 2012 Plan.

Grants

The 2012 Plan authorizes the grant to 2012 Plan participants of incentive stock options, non-statutory stock options, stock appreciation rights, restricted stock, restricted stock units, performance units, performance shares, and other stock or cash awards intended to comply with Section 162(m) of the Internal Revenue Code (as amended, the "Code") and stock appreciation rights, as described below:

Stock Options. Stock options entitle the participant, upon exercise, to purchase a specified number of shares of common stock at a specified price for a specified period of time. The Administrator may grant incentive and/or non-statutory stock options under the 2012 Plan. The exercise price for each stock option shall be determined by

the Administrator but shall not be less than 100% of the fair market value of the common stock on the date of grant. The “fair market value” means, if the stock is listed on any established stock exchange or national market system, the closing sales price of the stock, or, if the common stock is regularly quoted by a recognized securities dealer, but the selling prices are not reported, the mean between the high bid and low asked prices for the common stock on the day of determination, or in the absence of an established market for the stock, or if the stock is not regularly quoted or does not have sufficient trades or bid prices which would reflect the stock’s actual fair market value, the fair market value of the common stock will be determined in good faith by the Administrator upon the advice of a qualified valuation expert.

Any stock options granted in the form of an incentive stock option will be intended to comply with the requirements of Section 422 of the Code. Only options granted to employees qualify for incentive stock option treatment.

Each stock option shall expire at such time as the Administrator shall determine at the time of grant. No stock option shall be exercisable later than the tenth anniversary of its grant. A stock option may be exercised in whole or in installments. A stock option may not be exercisable for a fraction of a share. Shares of common stock purchased upon the exercise of a stock option must be paid for in full at the time of exercise in cash or such other consideration determined by the Administrator.

Stock Appreciation Rights. A stock appreciation right (“SAR”) is the right to receive a payment equal to the excess of the fair market value of a specified number of shares of common stock on the date the SAR is exercised over the exercise price of the SAR. The exercise price for each SAR shall not be less than 100% of the fair market value of the common stock on the date of grant, and the term of an SAR shall be no more than ten years from the date of grant. At the discretion of the Administrator, the payment upon an SAR exercise may be in cash, in shares equivalent thereof, or in some combination thereof.

Upon exercise of an SAR, the participant shall be entitled to receive payment from Organovo Holdings, Inc. in an amount determined by multiplying the excess of the fair market value of a share of common stock on the date of exercise over the exercise price of the SAR by the number of shares with respect to which the SAR is exercised.

Restricted Stock and Restricted Stock Units. Restricted stock and restricted stock units may be awarded or sold to participants under such terms and conditions as shall be established by the Administrator. Restricted stock and restricted stock units shall be subject to such restrictions as the Administrator determines, including a prohibition against sale, assignment, transfer, pledge or hypothecation, and a requirement that the participant forfeit such shares or units in the event of termination of employment. A restricted stock unit provides a participant the right to receive payment at a future date after the lapse of restrictions or achievement of performance criteria or other conditions determined by the Administrator.

Performance Stock. The Administrator shall designate the participants to whom long-term performance stock/units are to be awarded and determine the number of shares, the length of the performance period and the other vesting terms and conditions of each such award. Each award of performance stock/units shall entitle the participant to a payment in the form of shares/units of common stock upon the attainment of performance goals and other vesting terms and conditions specified by the Administrator. The Administrator may, in its discretion, make a cash payment equal to the fair market value of shares of common stock otherwise required to be issued to a participant pursuant to a Performance Stock Award.

All awards made under the 2012 Plan may be subject to vesting and other contingencies as determined by the Administrator and will be evidenced by agreements approved by the Administrator which set forth the terms and conditions of each award.

Duration, Amendment, and Termination

Unless sooner terminated by the Board, the 2012 Plan will terminate ten years after its adoption. The Board may amend, alter, suspend or terminate the 2012 Plan at any time or from time to time without stockholder approval or ratification, unless necessary and desirable to comply with applicable law. However, before an amendment may be made that would adversely affect a participant who has already been granted an award, the participant's consent must be obtained.

2011 Director Compensation

Our directors play a critical role in guiding our strategic direction and overseeing the management of the Company. Ongoing developments in corporate governance and financial reporting have resulted in an increased demand for such highly qualified and productive public company directors. The many responsibilities and risks and the substantial time commitment of being a director of a public company require that we provide adequate incentives for our directors' continued performance by paying compensation commensurate with our directors' workload. Our non-employee directors are compensated based upon their respective levels of board participation and responsibilities, including service on Board Committees. Mr. Murphy, our President and Chief Executive Officer, receives no separate compensation for his service as a director.

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

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards (\$)	All Other Compensation (\$)	Total (\$)
Robert Baltera, Jr. ⁽¹⁾	—	\$2,898	—	—	\$2,898
Andras Forgacs ⁽²⁾	—	—	—	—	—
Gabor Forgacs ⁽³⁾	—	—	—	—	—

- (1) In October, 2009 we entered into a Memorandum of Understanding with Robert Baltera, Jr. in connection with his ongoing service as one of our directors. Pursuant to this arrangement we granted Mr. Baltera 36,228 shares of restricted Common Stock, which vest in four equal annual installments, commencing one year from the date of grant, provided Mr. Baltera remains a director on the applicable vesting date. In October 2011 we additionally granted Mr. Baltera 32,423 shares of restricted Common Stock, one quarter of which vested that month and the remainder of which will vest in three equal annual installments. Our arrangement with Mr. Baltera is terminable at will by either party.
- (2) In February, 2008 we issued 60,365 shares of restricted Common Stock to Andras Forgacs as compensation for his services as a director. These shares vested to the extent of 25% of the original grant on the first anniversary of the grant date, and thereafter at the rate of 6.25% of the original grant on a quarterly basis, provided that Mr. Forgacs remains a director on the applicable vesting date.
- (3) Gabor Forgacs resigned as a director effective February 8, 2012.

Our director compensation is overseen by the Compensation Committee, which makes recommendations to the Board of Directors on the appropriate amount and structure of our programs in light of then-current competitive practice. The Compensation Committee receives advice and recommendations from Compensia, our compensation consultant, with respect to its determination on director compensation matters. In September 2012, the Compensation Committee adopted our current non-employee director compensation policy, pursuant to which non-employee directors are compensated for their services on our Board of Directors.

Pursuant to this policy, our non-employee directors will receive a fee of \$2,000 for attending each board meeting and \$1,000 for attending each committee meeting (for which he or she is a member) and will be reimbursed for reasonable out-of-pocket expenses incurred in attending such meetings. Committee chairs will receive an additional annual fee as follows: Audit Committee, \$10,000; Compensation Committee, \$6,000; and Nominating

and Governance Committee, \$5,500. In the event we appoint a non-employee director to serve either as a Non-Executive Chairman or a Lead Director, such director will receive an annual retainer of \$30,000 if serving as the Non-Executive Chairman or \$18,000 if serving as the Lead Director.

In addition, pursuant to this policy, non-employee directors will receive equity-based compensation under our 2012 Equity Incentive Plan. Each non-employee director will receive an annual grant of options to acquire the number of shares of our common stock equal to 0.04% of our outstanding shares of common stock as of the end of our most recently completed fiscal quarter (rounded to the nearest 500 share) the day after each annual meeting of stockholders. These options will be granted at fair market value on the grant date, vest on the earlier of one year from the date of grant or the next annual meeting of stockholders and expire on the tenth anniversary of the grant date. Non-employee directors will also receive a grant of options to acquire the number of shares of our common stock equal to 0.07% of our outstanding shares of common stock as of the end of our most recently completed fiscal quarter (rounded to the nearest 500 share) upon his or her initial election to our board. These options will be granted at fair market value on the grant date, vest ratably on a quarterly basis over the first three anniversaries of the grant date and expire on the tenth anniversary of the grant date.

EQUITY COMPENSATION PLAN INFORMATION

	Number of Shares to be Issued Upon Exercise of Outstanding Stock Options and Restricted Stock Units	Weighted- Average Exercise Price of Outstanding Stock Options	Number of Shares Remaining Available for Future Issuance Under Equity Compensation Plans
Equity compensation plans approved by security holders:			
2008 Equity Incentive Plan	896,256	\$ 0.08	—
2012 Equity Incentive Plan	—	—	6,553,986
Equity compensation plans not approved by security holders			
Total	896,256	\$ 0.08	6,553,986

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following tables set forth certain information regarding the beneficial ownership of our common stock as of September 7, 2012 by (i) each person who, to our knowledge, beneficially owns more than 5% of our common stock; (ii) each of our directors and named executive officers; and (iii) all of our executive officers and directors as a group. Unless otherwise indicated in the table or 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 Organovo Holdings, Inc., 6275 Nancy Ridge Dr., San Diego, California 92121.

We determined the number of shares of common stock beneficially owned by each person under rules promulgated by the SEC, based on information obtained from Company records and filings with the SEC. The information is not necessarily indicative of beneficial ownership for any other purpose. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power and also any shares which the individual or entity had the right to acquire within sixty days of September 7, 2012. Applicable percentages are based on 44,280,355 shares of common stock outstanding as of September 7, 2012.

Name and address of Beneficial Owner	No. Shares of Common Stock Beneficially Owned	Percent of Common Stock Outstanding
5% or Greater Stockholders:		
Kevin Kimberlin ⁽⁶⁾ 1700 East Putnam Avenue Suite 401 Greenwich, CT 06870	5,489,433	12.4%
Gabor Forgacs	6,057,741 ⁽³⁾	13.7%
Directors:		
Keith Murphy ⁽¹⁾	6,311,092 ⁽²⁾	14.3%
Andras Forgacs ⁽¹⁾	766,588	1.7%
Robert Baltera, Jr. ⁽¹⁾	126,392 ⁽⁴⁾	*
James Glover ⁽¹⁾	—	*
Adam Stern ⁽¹⁾⁽⁵⁾ c/o Spencer Trask Ventures 750 Third Avenue New York, NY 10017	1,604,484	4.0%
Executive Officers:		
Barry D. Michaels ⁽¹⁾	207,500 ⁽⁸⁾	0.5% or *
Sharon Collins Presnell ⁽¹⁾	224,064 ⁽⁹⁾	*
Eric Michael David ⁽¹⁾	814,306 ⁽¹⁰⁾	1.8%
Michael Renard ⁽¹⁾	— ⁽¹¹⁾	*
All directors and executive officers as a group (9 persons)	10,213,296 ⁽⁷⁾	23.1%

* Less than 1.0%

- (1) Executive officer and/or director.
- (2) 255,255 of these shares are held by Equity Trust Co., Custodian FBO Keith Murphy IRA. Includes warrants to purchase 30,000 shares of Common Stock at an exercise price of \$1.00 per share.
- (3) Includes warrants to purchase 3,750 shares of Common Stock at an exercise price of \$1.00 per share.
- (4) 18,114 of these shares vested in or before October, 2011. Includes warrants to purchase 28,000 shares of Common Stock at an exercise price of \$1.00 per share.
- (5) Represents (i) 741,395 shares owned by Adam Stern, (ii) 360,000 shares underlying warrants owned by Adam Stern; (iii) 158,870 shares owned by ST Neuroscience Partners, LLC; (iv) 211,827 shares owned by Pavilion Capital Partners, LLC; and (v) 132,392 shares owned by Piper Venture Partners, LLC. Does not include shares underlying warrants held by the Placement Agent or its affiliates issued in connection with the Bridge Financing or the Offering.
- (6) Represents (i) 1,082,489 shares held by Spencer Trask Investment Partners, LLP and (ii) 4,406,943 shares underlying warrants owned by Spencer Trask Ventures, Inc. issued in connection with the Bridge Financing or the Offering.
- (7) Includes warrants to purchase 448,000 shares of Common Stock at an exercise price of \$1.00 per share. Does not include shares underlying warrants issued to the Placement Agent in connection with the Bridge Financing or the Offering.
- (8) Includes warrants to purchase 10,000 shares of Common Stock at an exercise price of \$1.00 per share. Includes 79,687 vested stock options. Does not include 62,500 additional shares of common stock subject to future vesting pursuant to a stock option agreement.
- (9) Stock option shares that will vest within 60 days of June 1, 2012. Does not include 847,192 additional shares of common stock subject to future vesting pursuant to the terms of stock option agreements.
- (10) Includes warrants to purchase 20,000 shares of Common Stock at an exercise price of \$1.00 per share. Does not include 600,000 shares of common stock subject to future vesting pursuant to the terms of a stock option agreement.
- (11) Does not include 600,000 shares of common stock subject to future vesting pursuant to the terms of a stock option agreement.

Changes in Control

We are not aware of any or a party to arrangements, including any pledge by any person of our securities, the operation of which may at a subsequent date result in a change of control.

Section 16(a) Beneficial Ownership Reporting Compliance.

Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Act"), requires our executive officers and directors and persons who beneficially own more than 10% of our common stock to file initial reports of beneficial ownership and reports of changes in beneficial ownership with the SEC. Such persons are required by SEC regulations to furnish us with copies of all Section 16(a) forms filed by such persons.

To the Company's knowledge, no person who, during the fiscal year ended December 31, 2011, was a director or officer of the Company, or beneficial owner of more than ten percent of the Company's common stock (which is the only class of securities of the Company registered under Section 12 of the Act), failed to file on a timely basis reports required by Section 16 of the Act during such fiscal year. The foregoing is based solely upon a review by the Company of Forms 3 and 4 relating to the most recent fiscal year as furnished to the Company under Rule 16a-3(d) under the Act, and Forms 5 and amendments thereto furnished to the Company with respect to its most recent fiscal year, and any representation received by the Company from any reporting person that no Form 5 is required.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Since January 2010, there has not been any transaction or series of similar transactions to which we were or are a party in which the amount involved exceeded or exceeds the lesser of \$120,000 or one percent of the average of our total assets at the applicable year end and in which any of our directors or executive officers, any holder of more than 5% of any class of our voting securities or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than the compensation arrangements described in "Executive Compensation" and the transactions set forth below. We believe that we have executed all of the transactions set forth below on terms no less favorable to us than we could have obtained from unaffiliated third parties.

Transactions with Public Company Shareholders

Forward Split, Split-Off and Share Cancellation

Real Estate Restoration and Rental, Inc.'s ("RERR") common stock was forward-split on a 10.5913504 for 1 basis, with a record date of January 23, 2012 and an effective date of January 31, 2012. As a result of this stock split and the Reincorporation Merger, there were approximately 6,000,000 shares of Organovo Holdings, Inc.'s ("Holdings-Delaware") common stock issued and outstanding before taking into account the issuance of shares of common stock to purchasers of Units (as defined below) in the Offering (as defined below) and in the Merger and after giving pro forma effect to the Split-Off, as discussed below.

Upon the closing of the Merger, Holdings-Delaware transferred all of its operating assets and liabilities to Organovo Split Corp., a Delaware corporation ("PSOS"), and split-off PSOS (the "Split-Off") through the sale of all of the outstanding capital stock of PSOS to its executive officers, directors and their affiliates (the "Split-Off Shareholders"). In connection with the Split-Off, 5,000,000 shares of common stock held by the Split-Off Shareholders were surrendered and cancelled without further consideration, other than the receipt of PSOS shares. An additional 1,236,000 shares of common stock were cancelled by other shareholders of Holdings-Delaware for no or nominal consideration. Concurrently with the closing of the Merger and in contemplation of the Merger, we completed the initial closing of a private offering (the "Offering") of our securities ("Units"), at a price of \$1.00 per Unit. Each Unit consists of one share of Common Stock and a warrant to purchase one share of Common Stock.

Transactions with the Placement Agent and its Related Parties

We retained Spencer Trask Ventures, Inc. to serve as our placement agent (the "Placement Agent") in connection with the Bridge Financing (as defined below), the Merger and the Offering as described herein. Adam Stern, one of our directors, is a Senior Managing Director of the Placement Agent.

The Placement Agent acted as finder to Organovo in connection with our bridge financing, in which Organovo issued \$1,500,000 in principal amount of its 6% convertible promissory notes due March 31, 2012 (the "Bridge Notes") and warrants to purchase an aggregate of 1,500,000 shares of Organovo's common stock at a price of \$1.00 per share (the "Bridge Warrants") to accredited investors (the "Bridge Financing"). The Placement Agent was issued warrants to purchase Organovo warrants that automatically converted into warrants to purchase 20% of the shares of Holdings-Delaware Common Stock underlying the Units issued upon the conversion of the Bridge Notes in the Offering at a price of \$1.00 per share as compensation for acting as a finder in the Bridge Financing. These warrants were exchanged at the initial close of the Offering for warrants (which are identical to the Placement Agent Warrants (as defined below) discussed below) to purchase 610,155 shares of common stock at an exercise price of \$1.00 per share.

Prior to the initial closing of the Offering, several related parties to the Placement Agent purchased an aggregate of 219,705 shares of Holdings-Delaware's common stock (2,326,974 shares on a post stock split adjusted basis)

from various shareholders of Holdings-Delaware. The aggregate purchase price paid to such shareholders by the related parties for such shares was approximately \$155,000. All of the foregoing shares of common stock are subject to a lock-up agreement. See "Lock-ups" below.

We engaged the Placement Agent as our exclusive placement agent in connection with a the Offering. For its services, we paid the Placement Agent (i) a cash fee equal to 10% of the gross proceeds raised in the Offering and (ii) a non-accountable expense allowance equal to 3% of the gross proceeds raised in the Offering. In addition, we granted to the Placement Agent or its designees, for nominal consideration, five-year warrants ("Placement Agent Warrants") to purchase shares of common stock at an exercise price of \$1.00 per share. The placement agent and its selected dealers were paid total cash commissions of \$1,372,260 and the Placement Agent was paid an expense allowance of \$411,678 and was issued Placement Agent Warrants to purchase 6,099,195 shares of common stock (including 610,155 warrants issued in connection with issuance of the bridge promissory notes and subsequently exchanged for new warrants in the Merger).

We have agreed to engage the Placement Agent as our warrant solicitation agent in the event the warrants issued to investors in the Offering (the "Investor Warrants") are called for redemption and shall pay a warrant solicitation fee to the Placement Agent equal to five (5%) percent of the amount of funds solicited by the Placement Agent upon the exercise of the Investor Warrants following such redemption.

The Placement Agent was granted the right to designate one member to our Board of Directors and has designated Adam Stern to fill such Board seat.

The price of the Units was determined following our discussions with the Placement Agent. Among the factors considered in the negotiations were our limited operating history, our history of losses, an assessment of our management and our proposed operations, our current financial condition, the prospects for the industry in which we operate, the prospects for the development of our business with the capital raised in the Offering and the general condition of the securities markets at the time of the Offering. The Offering price of the Units or the exercise price of the Investor Warrants did not necessarily bear any relationship to our assets, book value or results of operations or any other generally accepted criterion of value.

As a result of these transactions, as of April 13, 2012, Mr. Stern reported holding 741,395 shares of common stock and warrants to purchase 360,000 shares of common stock. He also reported indirect beneficial ownership of 158,870 shares owned by ST Neuroscience Partners, LLC, 211,827 shares owned by Pavilion Capital Partners, LLC; and 132,392 shares owned by Piper Venture Partners, LLC. As of April 27, 2012, Mr. Kimberlin reported indirect beneficial ownership of 1,082,489 shares held by Spencer Trask Investment Partners, LLP and warrants to purchase 4,406,943 shares owned by Spencer Trask Ventures, Inc. issued in connection with the Bridge Financing or the Offering.

We have agreed to indemnify the Placement Agent and other broker-dealers who are FINRA members selected by the Placement Agent to offer and sell Units, to the fullest extent permitted by law for a period of four (4) years from the closing of the Offering, against certain liabilities that may be incurred in connection with the Offering, including certain civil liabilities under the Securities Act, and, where such indemnification is not available, to contribute to the payments the Placement Agent may be required to make in respect of such liabilities. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to the Placement Agent, 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.

Lock-ups

Officers, directors and holders of 5% or more of our common stock have agreed to "lock-up" and not sell or otherwise transfer or hypothecate any of their shares for a term equal to the earlier of (i) twelve (12) months from the Closing Date of the Merger; or (ii) six (6) months following the effective date of the registration statement registering the shares of common stock that were sold in the Offering.

Related Party Transaction Policy and Procedures

Pursuant to our Related Party Transaction and Procedures, our executive officers, directors, and principal stockholders, including their immediate family members and affiliates, are prohibited from entering into a related party transaction with us without the prior consent of our Audit Committee or our independent directors. Any request for us to enter into a transaction with an executive officer, director, principal stockholder, or any of such persons' immediate family members or affiliates, in which the amount involved exceeds \$120,000 must first be presented to our Audit Committee for review, consideration and approval. In approving or rejecting the proposed agreement, our Audit Committee will consider the relevant facts and circumstances available and deemed relevant, including, but not limited, to the risks, costs and benefits to us, the terms of the transaction, the availability of other sources for comparable services or products, and, if applicable, the impact on a director's independence. Our Audit Committee shall approve only those agreements that, in light of known circumstances, are in, or are not inconsistent with, our best interests, as our Audit Committee determines in the good faith exercise of its discretion.

OTHER MATTERS

The Company is not aware of any matter to be acted upon at the Annual Meeting other than the matters described above. However, if any other matter properly comes before the Annual Meeting, the proxy holders will vote the proxies thereon in accordance with their best judgment on such matter.

STOCKHOLDER PROPOSALS FOR 2013 ANNUAL MEETING

Stockholders interested in submitting a proposal for consideration at our 2013 Annual Meeting must do so by sending such proposal to our Corporate Secretary at Organovo Holdings, Inc., 6275 Nancy Ridge Dr., San Diego, California 92121, Attention: Corporate Secretary. Under the SEC's proxy rules, the deadline for submission of proposals to be included in our proxy materials for the 2013 Annual Meeting is May 20, 2013. Accordingly, in order for a stockholder proposal to be considered for inclusion in our proxy materials for the 2013 Annual Meeting, any such stockholder proposal must be received by our Corporate Secretary on or before May 20, 2013, and comply with the procedures and requirements set forth in Rule 14a-8 under the Securities Exchange Act of 1934. Any stockholder proposal received after May 20, 2013 will be considered untimely, and will not be included in our proxy materials. In addition, stockholders interested in submitting a proposal outside of Rule 14a-8 must properly submit such a proposal in accordance with our Bylaws.

Our Bylaws require advance notice of business to be brought before a stockholders' meeting, including nominations of persons for election as directors. To be timely, notice to our Corporate Secretary must be received at our principal executive offices not less than 45 days but not more than 75 days before the one-year anniversary of the date on which we first mailed our proxy materials or a notice of availability of proxy materials (whichever is earlier) for the preceding year's annual meeting and must contain specified information concerning the matters to be brought before such annual meeting and concerning the stockholder proposing such matters. Therefore, to be presented at our 2013 Annual Meeting, such a proposal must be received by the Company on or after July 4, 2013 but no later than August 3, 2013. If the date of the 2013 Annual Meeting is advanced by more than 30 days prior to, or delayed by more than 60 days after, the one-year anniversary of the 2012 Annual Meeting, notice must be received by the Corporate Secretary not earlier than the close of business on the 120th day prior to the 2013 Annual Meeting and not later than the close of business on the later of (i) the 90th day prior to the 2013 Annual Meeting, or (ii) the tenth day following the day on which public announcement of the date of the 2013 Annual Meeting is first made.

HOUSEHOLDING OF ANNUAL MEETING MATERIALS

We have adopted “householding,” a procedure approved by the SEC under which stockholders who share an address will receive a single copy of the Proxy Statement (including financial information for the fiscal year ended December 31, 2011) and Notice. This procedure reduces printing costs and mailing fees, while also reducing the environmental impact of the distribution of documents related to the Annual Meeting. If you reside at the same address as another Organovo Holdings stockholder and wish to receive a separate copy of these Annual Meeting materials, you may do so by making a written or oral request to: Organovo Holdings, Inc., 6275 Nancy Ridge Dr., San Diego, California 92121, Attn: Corporate Secretary, telephone (858) 224-1003. Upon your request, we will promptly deliver a separate copy to you. The Proxy Statement, Notice, Annual Report and Proxy Card are also available at <https://www.proxyvote.com>.

Some brokers household proxy materials, delivering a single proxy statement or notice to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be householding materials to your address, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement or notice, please notify your broker directly. You may also call (800) 542-1061 or write to: Householdings Department, Broadridge, 51 Mercedes Way, Edgewood, New York 11717, and include your name, the name of your broker or other nominee, and your account number(s). Any stockholders who share the same address and currently receive multiple copies of the Proxy Statement and Notice who wish to receive only one copy in the future may contact their bank, broker, or other holder of record, or the Corporate Secretary of Organovo Holdings at the contact information listed above, to request information about householding.

ADDITIONAL INFORMATION

We make available, free of charge on our website, all of our filings that are made electronically with the SEC. These materials can be found in the “Investors” section of our website at www.organovo.com, by clicking the “SEC Filings” link. Copies of our SEC filings are also available without charge to stockholders upon written request addressed to: Organovo Holdings, Inc., 6275 Nancy Ridge Dr., San Diego, California 92121.

By Order of the Board of Directors

/s/ Barry Michaels

Barry Michaels
Chief Financial Officer and Secretary

September 17, 2012

Appendix A

ORGANOVO HOLDINGS, INC. 2012 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 \$0.001 per share, of the Company.

k. "Company" means Organovo Holdings, Inc., a Delaware 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 the Company or a Subsidiary.

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 determined as follows:

- i. If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market of The Nasdaq Stock Market, its Fair Market Value will be the closing sales price for such stock (or if no closing sales price was reported on that date, as applicable, on the last trading date such closing sales price was reported) as quoted on such exchange or system on the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;
- ii. If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share will be the mean between the high bid and low asked prices for the Common Stock on the day of determination (or, if no bids and asks were reported on that date, as applicable, on the last trading date such bids and asks were reported), as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; or
- iii. In the absence of an established market for the Common Stock, or if such Common Stock is not regularly quoted or does not have sufficient trades or bid prices which would accurately reflect the actual Fair Market Value of the Common Stock, the Fair Market Value will be determined in good faith by the Administrator upon the advice of a qualified valuation expert.

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 2012 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 15 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 15 hereof, the maximum aggregate number of Shares that may be awarded and sold under the Plan is 6,700,000 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, is surrendered pursuant to an Exchange Program, 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 number of Shares to be covered by each Award granted hereunder;
- iv. to approve forms of Award Agreements for use under the Plan;
- v. to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder;
- vi. 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;

- vii. to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;
- viii. 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 or for qualifying for favorable tax treatment under applicable foreign laws;
- ix. to modify or amend each Award (subject to Section 20.c hereof), including but not limited to the discretionary authority to extend the post-termination exercisability period of Awards;
- x. to allow Participants to satisfy withholding tax obligations in a manner described in Section 16 hereof;
- xi. 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;
- xii. 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
- xiii. 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. In the case of an Incentive Stock Option, the Administrator will determine the acceptable form of consideration at the time of grant. Such consideration may consist entirely of: (1) cash; (2) check; (3) promissory note, to the extent permitted by Applicable Laws, (4) other Shares, provided that such Shares have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which such Option will be exercised and provided further that accepting such Shares will not result in any adverse accounting consequences to the Company, as the Administrator determines in its sole discretion; (5) consideration received by the Company under cashless exercise program (whether through a broker or otherwise) implemented by the Company in connection with the Plan; (6) by net exercise, (7) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws, or (8) any combination of the foregoing methods of payment. In making its determination as to the type of consideration to accept, the Administrator will consider if acceptance of such consideration may be reasonably expected to benefit the Company.

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). Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan. Shares issued upon exercise of an Option will be issued in the name of the Participant or, if requested by the Participant, in the name of the Participant and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares subject to an Option, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. 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 15 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. Unless the Administrator determines otherwise, the Company as escrow agent will hold Shares of Restricted Stock until the restrictions on such Shares have lapsed.

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; (xi) return on capital, including but not limited to return on invested capital against a weighted average cost of capital; (xii) return on net assets; (xiii) economic value added; (xiv) market share; (xv) customer service; (xvi) customer satisfaction; (xvii) safety; (xviii) total stockholder return; (xix) free cash flow; (xx) net operating income; (xxi) operating cash flow; (xxii) return on investment; (xxiii) employee satisfaction; (xxiv) employee retention; (xxv) balance of cash, cash equivalents and marketable securities; (xxvi) product development; (xxvii) research and development expenses; (xxviii) completion of an identified special project; (xxix) completion of a joint venture or other corporate transaction; (xxx) filing of patents; (xxxi) submission and/or publication of Scientific Works; (xxxii) execution or expansion of strategic partnerships or relationships; or (xxxiii) such other measures as determined by the Committee consistent with the terms of the Equity Incentive Plan. 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. Compliance with Code Section 409A. Awards will be designed and operated in such a manner that they are either exempt from the application of, or comply with, the requirements of Code Section 409A, except as otherwise determined in the sole discretion of the Administrator. The Plan and each Award Agreement under the Plan is intended to meet the requirements of Code Section 409A and will be construed and interpreted in accordance with such intent, except as otherwise determined in the sole discretion of the Administrator. To the extent that an Award or payment, or the settlement or deferral thereof, is subject to Code Section 409A the Award will be granted, paid, settled or deferred in a manner that will meet the requirements of Code Section 409A, such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Code Section 409A.

13. 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.

14. 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.

15. 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, 30, 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 of the Company with or into another corporation or other entity or a Change in Control, each outstanding Award will be treated as the Administrator determines (subject to the provisions of the proceeding paragraph) without a Participant's consent, including, without limitation, that (i) Awards will be assumed, or substantially equivalent Awards will be substituted, by the acquiring or succeeding corporation (the "Successor Corporation") (or an affiliate thereof) with appropriate adjustments as to the number and kind of shares and prices; (ii) upon written notice to a Participant, that the Participant's Awards will terminate upon or immediately prior to the consummation of such merger or Change in Control; (iii) outstanding Awards will vest and become exercisable, realizable, or payable, or restrictions applicable to an Award will lapse, in whole or in part prior to or upon consummation of such merger or Change in Control, and, to the extent the Administrator determines, terminate upon or immediately prior to the effectiveness of such merger or Change in Control; (iv) (A) the termination of an Award in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon the exercise of such Award or realization of the Participant's rights as of the date of the occurrence of the transaction (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction the Administrator determines in good faith that no amount would have been attained upon the exercise of such Award or realization of the Participant's rights, then such Award may be terminated by the Company without payment), or (B) the replacement of such Award with other rights or property selected by the Administrator in its sole discretion; or (v) any combination of the foregoing. In taking any of the actions permitted under this subsection c, the Administrator will not be obligated to treat all Awards, all Awards held by a Participant, or all Awards of the same type, similarly.

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 15.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.

16. 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.

17. 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.

18. 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.

19. Term of Plan. Subject to Section 23 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 20 hereof.

20. 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.

21. 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.

22. 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.

23. 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.

24. 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.

25. 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.

26. Choice of Law. The Plan and all rules and determinations made and taken pursuant hereto will be governed by the laws of the State of Delaware, to the extent not preempted by federal law, and construed accordingly.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting: The Annual Report, Notice & Proxy Statement is/ are available at www.proxyvote.com.

**ORGANOVO HOLDINGS, INC.
Annual Meeting of Stockholders
October 17, 2012 9:00 AM Pacific Time
This proxy is solicited by the Board of Directors**

The stockholder(s) hereby appoint(s) Barry Michaels, as proxy, with the power to appoint his substitute, and hereby authorizes him to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of ORGANOVO HOLDINGS, INC. that the stockholder(s) is/are entitled to vote at the Annual Meeting of stockholder(s) to be held at 09:00 AM, PDT on 10/17/2012, at Organovo Holdings, Inc., 6275 Nancy Ridge Dr. San Diego, California 92121, and any adjournment or postponement thereof.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations.

Continued and to be signed on reverse side

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VOTE BY INTERNET - www.proxyvote.com

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

ORGANOVO HOLDINGS, INC.
6275 Nancy Ridge Drive
SAN DIEGO, CA 92121

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS

If you would like to reduce the costs incurred by our company in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access proxy materials electronically in future years.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 P.M. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

KEEP THIS PORTION FOR YOUR RECORDS
DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

The Board of Directors recommends you vote FOR the following:

1. Election of Directors

Nominees

- 01 Keith Murphy

For Against Abstain

The Board of Directors recommends you vote FOR proposals 2 and 3:

- 2 To approve revised performance criteria and the award limitations under the Organovo Holdings, Inc. 2012 Equity Incentive Plan to ensure that the Company may fully deduct the amount or value of performance awards granted under the Plan
- 3 To ratify the appointment of Mayer Hoffman McCann P.C. as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2012

For Against Abstain

NOTE: Such other business as may properly be brought before the 2012 Annual Meeting or any adjournment or postponement thereof.

Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name, by authorized officer.

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Signature [PLEASE SIGN WITHIN BOX]

Date

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Signature (Joint Owners)

Date

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