



**Organovo Holdings, Inc.**  
**440 Stevens Ave, Suite 200**  
**Solana Beach, CA 92075**

August 5, 2021

Dear Stockholder:

You are cordially invited to attend this year's Annual Meeting of Stockholders of Organovo Holdings, Inc. on Tuesday, September 14, 2021 at 9:00 a.m. (Pacific Daylight Time). **The Annual Meeting will be completely virtual. You may attend the virtual meeting, submit questions and vote your shares electronically during the meeting via live webcast by visiting [www.virtualshareholdermeeting.com/ONVO2021](http://www.virtualshareholdermeeting.com/ONVO2021).**

We are pleased to furnish proxy materials primarily over the internet based on the rules established by the Securities and Exchange Commission. We believe this will allow us to quickly provide proxy materials to you, while lowering the costs of distribution and reducing the environmental impact of our Annual Meeting.

On August 5, 2021, we mailed a Notice of Internet Availability of Proxy Materials (the "Notice") to our stockholders (other than those who previously requested electronic or paper delivery) containing instructions on how to access our proxy materials, including our Proxy Statement and Annual Report to Stockholders for the fiscal year ended March 31, 2021, over the internet. The Notice also provides instructions on how to vote online or by telephone and includes instructions on how you can receive a paper copy of the proxy materials by mail. If you receive your proxy materials by mail, the Annual Report, the Notice of 2021 Annual Meeting of Stockholders, the Proxy Statement, and proxy card will be enclosed.

The matters to be acted upon are described in the Notice of 2021 Annual Meeting of Stockholders and Proxy Statement. Following the formal business of the meeting, we will respond to questions from stockholders.

Whether or not you plan to virtually attend the meeting, your vote is very important and we encourage you to vote promptly. You may vote by proxy over the internet or by telephone, or, if you received paper copies of the proxy materials by mail, you can also vote by mail by following the instructions on your proxy card. If you virtually attend the meeting, you will have the right to revoke your proxy and vote electronically during the meeting via the live webcast. If you hold your shares through an account with a brokerage firm, bank or other nominee, please follow the instructions you receive from your brokerage firm, bank or other nominee to vote your shares.

On behalf of your Board of Directors, thank you for your continued support and interest.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Keith Murphy", written in a cursive style.

Keith Murphy  
*Executive Chairman*

**ORGANOVO HOLDINGS, INC. NOTICE OF 2021 ANNUAL MEETING OF STOCKHOLDERS TO BE  
HELD ON SEPTEMBER 14, 2021**

To Our Stockholders:

The 2021 Annual Meeting of Stockholders (the “Annual Meeting”) of Organovo Holdings, Inc. (“we,” “us,” “our,” “Organovo” or the “Company”) will be held on Tuesday, September 14, 2021, at 9:00 a.m. (Pacific Daylight Time). **The Annual Meeting will be completely virtual. You may attend the meeting, submit questions and vote your shares electronically during the meeting via live webcast by visiting [www.virtualshareholdermeeting.com/ONVO2021](http://www.virtualshareholdermeeting.com/ONVO2021).** At the Annual Meeting, our stockholders will be asked:

1. To elect Alison Tjosvold Milhous as a Class I director to hold office until the 2024 Annual Meeting of Stockholders and until her successor is elected and qualified;
2. To ratify the appointment of Mayer Hoffman McCann P.C. as our independent registered public accounting firm for the fiscal year ending March 31, 2022;
3. To approve, on an advisory basis, the compensation of our named executive officers;
4. To approve an amendment and restatement of our Amended and Restated 2012 Equity Incentive Plan; and
5. To transact such other business as may properly be brought before the Annual Meeting or any adjournments or postponements thereof.

Our Board of Directors recommends a vote **FOR** the director nominee, and **FOR** proposals 2, 3 and 4 listed above. Stockholders of record at the close of business on July 19, 2021 are entitled to notice of, and to vote on, all matters at the Annual Meeting and any reconvened meeting following any adjournments or postponements thereof. For 10 days prior to the Annual Meeting, a complete list of stockholders entitled to vote at the Annual Meeting will be available for examination by any stockholder, for any purpose relating to the Annual Meeting, during ordinary business hours at our corporate offices located at 440 Stevens Ave, Suite 200, Solana Beach, CA 92075.

All stockholders are invited to attend the virtual Annual Meeting. Whether or not you expect to attend the Annual Meeting, you are urged to vote or submit your proxy as soon as possible so that your shares can be voted at the Annual Meeting in accordance with your instructions. Telephone and internet voting are available. For specific instructions on voting, please refer to the instructions in the Notice of Internet Availability of Proxy Materials or the proxy card. If you hold your shares through an account with a brokerage firm, bank or other nominee, please follow the instructions you receive from them to vote your shares.

**Important Notice Regarding Availability of Proxy Materials for the Annual Meeting:** Our Notice of 2021 Annual Meeting of Stockholders, Proxy Statement and Annual Report are available at [www.proxyvote.com](http://www.proxyvote.com).

By Order of the Board of Directors



Thomas Jurgensen  
*General Counsel and Corporate Secretary*

August 5, 2021



## 2021 Proxy Statement Summary

To assist you in reviewing the Proxy Statement for the Organovo Holdings, Inc. (“we,” “us,” “our,” “Organovo” or the “Company”) 2021 Annual Meeting of Stockholders (the “Annual Meeting”), we call your attention to the following summary information about the Annual Meeting, the proposals to be considered at the Annual Meeting and our corporate governance and compensation frameworks. For more complete information, please review our Proxy Statement. **Regardless of the number of shares you own, your VOTE is very important.** Even if you presently plan to virtually attend the Annual Meeting, please vote or submit your proxy as soon as possible so that your shares can be voted at the Annual Meeting in accordance with your instructions. Telephone and internet voting are available. For specific instructions on voting, please refer to the instructions in the Notice of Internet Availability of Proxy Materials or the proxy card. If you do virtually attend the Annual Meeting and wish to vote electronically, you may withdraw your proxy at that time.

### Annual Meeting of Stockholders

Date and Time: September 14, 2021 at 9:00 a.m. (Pacific Daylight Time)

Place: [www.virtualshareholdermeeting.com/ONVO2021](http://www.virtualshareholdermeeting.com/ONVO2021)

Record Date: July 19, 2021

Voting: If you were a “stockholder of record” or beneficial owner of shares held in “street name” as of the Record Date, you may vote your shares. You may vote in person at the Annual Meeting or by the internet, telephone or mail. See the “General Information – Voting Instructions” in the Proxy Statement for more detail regarding how you may vote your shares.

Virtual Meeting: The Annual Meeting will be conducted as a virtual meeting of stockholders by means of a live webcast. We believe that hosting a virtual meeting will enable greater stockholder attendance and participation from any location, improved communication and cost savings to our stockholders. You can virtually attend the Annual Meeting by visiting [www.virtualshareholdermeeting.com/ONVO2021](http://www.virtualshareholdermeeting.com/ONVO2021), where you will be able to vote your shares and submit your questions during the meeting via the internet. There will not be a physical meeting location and you will not be able to attend in person.

The Annual Meeting starts at 9:00 a.m. (Pacific Daylight Time). We encourage you to access the meeting website prior to the start time to allow time for check-in. If you encounter any difficulties accessing the virtual meeting during the check-in or meeting time, please call the technical support number that will be posted on the virtual shareholder meeting login page.

You do not need to register to virtually attend the Annual Meeting webcast. Follow the instructions on your Notice of Internet Availability or proxy card (if you requested and received a printed copy of the proxy materials) to access the Annual Meeting.

## Proposals and Voting Recommendations

	Board Vote Recommendation	Page References (for more detail)
<b>Proposals:</b>		
(1) Election of one Class I director to hold office until the 2024 Annual Meeting of Stockholders and until her successor is elected and qualified.	<b>FOR</b>	7
(2) Ratification of appointment of Mayer Hoffman McCann P.C. as our independent registered public accounting firm for the fiscal year ending March 31, 2022.	<b>NOMINEE</b>	
	<b>FOR</b>	8 – 9
(3) To approve, on an advisory and non-binding basis, the compensation of our named executive officers.	<b>FOR</b>	10
(4) To approve an amendment and restatement of our Amended and Restated 2012 Equity Incentive Plan	<b>FOR</b>	11 – 20

## Current Corporate Governance Summary Facts

We seek to maintain high standards of business conduct and corporate governance, which we believe are fundamental to the overall success of our business, serve our stockholders well and maintain our integrity in the marketplace. The following table summarizes some of the key elements of our current corporate governance framework:

Size of Board	5
Number of Independent Directors	4
Independent Chairman	No
Board Self-Evaluation	Periodic
Review Board and Board Committee Independence and Qualifications	Annual
Hold Executive Sessions	Yes
Annual Director Elections	No
All Directors Received At Least 80% Approval Based on Votes Cast	No
Diverse Board (as to background, experience and skills)	Yes
Board has Adopted Corporate Governance Guidelines	Yes
Board has Not Amended Charters or Taken Actions to Reduce Stockholder Rights	True
Director Meeting Attendance Above 75%	Yes
Stock Ownership Guidelines	Yes
No Family Relationships Among Officers and Directors	True
All Committee Chairs and Other Committee Members Qualify as Independent Directors	Yes

## Summary of Compensation Best Practices

Our Board of Directors (the “Board of Directors” or the “Board”) established a Compensation Committee of the Board (the “Compensation Committee”) comprised of three independent directors in accordance with the rules and regulations established by the Securities and Exchange Commission and the Nasdaq Capital Market. Our Board has delegated to the Compensation Committee the authority to establish the Company’s executive compensation program and to approve all compensation received by the Company’s executive officers and the other members of its management team. The Compensation Committee retained Anderson Pay Advisors LLC (“Anderson”) as its independent compensation consultants, to assist it in evaluating the Company’s executive compensation program for the fiscal year ended March 31, 2021 and selecting an appropriate peer group of comparable companies for purposes of setting executive compensation.

The Compensation Committee regularly reviews best practices in governance and executive compensation. The following is a high-level summary of certain executive compensation practices that the Compensation Committee believes drive Company performance and serve our stockholders' long-term interests:

Compensation Committee Comprised of At Least Three Independent Directors	Yes
Independent Compensation Consultant Retained	Yes
Compensation Committee Members all qualify as “outside directors” and “non-employee directors”	True
Compensation Based on Comparison to Peer Group Data	Yes
All Directors and Officers Subject to Stock Ownership Guidelines	Yes
Compensation Committee Performs Compensation Risk Assessment	Annual
Prohibitions Against all Directors, Officers and Employees Hedging or Pledging Stock	Yes
Incentive Plans Based on Performance Metrics	Yes
Company Does Not Offer Tax Gross Ups for Severance or Change of Control	Yes
Reasonable and Double Trigger Accelerated Vesting Provisions Adopted	Yes
No Multi-Year Guaranteed Bonuses	Yes
Stock Option Plan Prohibits Option repricing and Share Recycling	Yes
Company Has Not Repriced Options in Last Three Years	Yes
No Executive Employment Agreements with Guaranteed Terms	Yes
Offer Limited Perquisites to Executives	Yes
Consider Prior Year’s Advisory Vote regarding Named Executive Officer Compensation	Yes
Terms of Severance Plan Described to Stockholders	Yes

## TABLE OF CONTENTS

GENERAL INFORMATION .....	1
PROPOSAL 1: ELECTION OF DIRECTOR .....	6
PROPOSAL 2: RATIFICATION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM .....	7
PROPOSAL 3: ADVISORY VOTE TO APPROVE COMPENSATION OF NAMED EXECUTIVE OFFICERS .....	9
PROPOSAL 4: AMENDMENT AND RESTATEMENT OF THE AMENDED AND RESTATED 2012 EQUITY INCENTIVE PLAN .....	10
BOARD OF DIRECTORS INFORMATION .....	20
CORPORATE GOVERNANCE .....	23
Overview .....	23
Corporate Governance Guidelines .....	23
Code of Business Conduct .....	23
Board Independence .....	23
Board Leadership Structure .....	24
Board Committees .....	24
Board and Committee Attendance .....	25
Director Attendance at the Annual Meeting .....	25
Executive Sessions .....	25
Board Oversight of Risk .....	26
Compensation Committee Interlocks and Insider Participation .....	26
Stock Ownership Guidelines .....	26
Succession Planning .....	26
Consideration of Director Nominees .....	26
Communications with the Board of Directors .....	27
DIRECTOR COMPENSATION .....	28
Non-Employee Director Compensation Framework .....	28
Director Compensation Table .....	29
EXECUTIVE OFFICERS .....	31
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT .....	33
EXECUTIVE COMPENSATION .....	35
Recent “Say- -Pay” Vote .....	35
Compensation Philosophy and Objectives .....	35
Use of Market Data and Benchmarking .....	36
Determination of Executive Compensation .....	36
Commitment to Good Compensation Governance Practices .....	37
Components of Executive Compensation .....	37
Other Benefits .....	40
Prior Severance Plan .....	40
Change in Control under Prior Severance Plan – Advisory Nominee Proposal .....	43
Current Severance Arrangement .....	43
Potential Payments upon Termination or Change in Control .....	44
Death or Disability Benefits .....	44
Summary Compensation Table .....	44
Outstanding Equity Awards at Fiscal Year End .....	45
REPORT OF THE AUDIT COMMITTEE .....	47
CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS .....	48

OTHER MATTERS .....	49
PROXY SOLICITATION.....	49
STOCKHOLDER PROPOSALS FOR 2022 ANNUAL MEETING .....	50
HOUSEHOLDING OF ANNUAL MEETING MATERIALS .....	50
ANNUAL REPORT ON FORM 10-K .....	51
APPENDIX A ORGANOVO HOLDINGS, INC. AMENDED AND RESTATED 2012 EQUITY INCENTIVE PLAN .....	52

[This page intentionally left blank]



**ORGANOVO HOLDINGS, INC.**  
440 Stevens Ave, Suite 200  
Solana Beach, CA 92075

**PROXY STATEMENT FOR THE 2021 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD  
SEPTEMBER 14, 2021**

**This Proxy Statement, along with a proxy card, is being made available to our stockholders on or about  
August 5, 2021**

**GENERAL INFORMATION**

We have made these proxy materials available to you in connection with the solicitation by the Board of Directors (the “Board” or “Board of Directors”) of Organovo Holdings, Inc. of proxies to be voted at the 2021 Annual Meeting of Stockholders (the “Annual Meeting”) to be held virtually on Tuesday, September 14, 2021 at 9:00 a.m. (Pacific Daylight Time) via live webcast by visiting [www.virtualshareholdermeeting.com/ONVO2021](http://www.virtualshareholdermeeting.com/ONVO2021). References in this Proxy Statement to the “Company,” “Organovo,” “we,” “our” and “us” are to Organovo Holdings, Inc. and its subsidiaries.

In accordance with the rules of the Securities and Exchange Commission (the “SEC”), we are permitted to furnish proxy materials, including this Proxy Statement and our Annual Report for the fiscal year ended March 31, 2021 (the “Annual Report”), to stockholders by providing access to these documents through the internet instead of mailing printed copies. Most stockholders will not receive printed copies of the proxy materials unless requested. Instead, the Notice of Internet Availability of Proxy Materials provides instructions on how to access and review the proxy materials on the internet. The Notice of Internet Availability of Proxy Materials also provides instructions on how to cast your vote via the internet or by telephone. If you would like to receive a printed or email copy of our proxy materials, please follow the instructions for requesting the materials in the Notice of Internet Availability of Proxy Materials.

**Record Date**

Holders of shares of our common stock, our only class of issued and outstanding voting securities, at the close of business on July 19, 2021 (the “Record Date”) are entitled to vote on the proposals presented at the Annual Meeting. As of July 19, 2021, we had 8,705,358 issued and outstanding shares of common stock.

**Quorum**

The presence, in person or by proxy, of the holders of at least 4,352,680 shares of common stock, representing a majority of the outstanding shares of common stock entitled to vote at the virtual 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.

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

**Virtual Annual Meeting**

The Annual Meeting will be conducted as a virtual meeting of stockholders by means of a live webcast. We believe that hosting a virtual meeting will enable greater stockholder attendance and participation from any location, improved communication and cost savings to our stockholders. You can virtually attend the Annual Meeting by visiting [www.virtualshareholdermeeting.com/ONVO2021](http://www.virtualshareholdermeeting.com/ONVO2021), where you will be able to vote your shares and submit your questions during the meeting via the internet. There will not be a physical meeting location and you will not be able to attend in person.

We invite you to virtually attend the Annual Meeting and request that you vote on the proposals described in this proxy statement. However, you do not need to attend the virtual meeting to vote your shares. Instead, you may vote by internet, by telephone or, if you requested and received paper copies of the proxy materials by mail, you may also vote by completing and mailing your proxy card.

The Annual Meeting starts at 9:00 a.m. (Pacific Daylight Time) on Tuesday, September 14, 2021. We encourage you to access the meeting website prior to the start time to allow time for check-in. If you encounter any difficulties accessing the virtual meeting during the check-in or meeting time, please call the technical support number that will be posted on the virtual shareholder meeting login page.

You do not need to register to virtually attend the Annual Meeting webcast. Follow the instructions on your Notice of Internet Availability or proxy card (if you requested and received a printed copy of the proxy materials) to access the Annual Meeting.

If you wish to submit a question the day of the Annual Meeting, you may log in to the virtual meeting platform at [www.virtualshareholdermeeting.com/ONVO2021](http://www.virtualshareholdermeeting.com/ONVO2021), type your question into the “Ask a Question” field and click “Submit.” Questions pertinent to meeting matters will be answered during the Annual Meeting, subject to time constraints. Questions regarding personal matters, including those related to employment, are not pertinent to annual meeting matters and, therefore, will not be answered.

### **Stockholders of Record**

You are a “stockholder of record” if your shares are registered directly in your name with our transfer agent, Continental Stock Transfer and Trust Company. As a stockholder of record, you have the right to grant your voting proxy directly to the Company or to vote in person at the Annual Meeting. All shares represented by a proxy will be voted at the Annual Meeting, and where a stockholder specifies choice with respect to any matter to be acted upon, the shares will be voted in accordance with the specification so made. If a stockholder does not indicate a choice on the proxy card, the shares will be voted in favor of the election of the nominee for director contained in this Proxy Statement and in favor of Proposals 2, 3 and 4.

### **Shares Held in Street Name**

You are deemed to beneficially own your shares in “street name” if your shares are held in an account at a brokerage firm, bank, broker-dealer, trust or other similar organization. If this is the case, you will receive a separate voting instruction form with this Proxy Statement from such organization. As the beneficial owner, you have the right to direct your broker, bank, trustee or nominee how to vote your shares, and you are also invited to attend the Annual Meeting. If you hold your shares in street name and do not provide voting instructions to your broker, bank, trustee or nominee, your shares will not be voted on any proposals on which such party does not have discretionary authority to vote (a “broker non-vote”), as further described below under the heading “Broker Non-Votes.”

Please note that if your shares are held of record by a broker, bank, trustee or nominee and you wish to vote at the virtual Annual Meeting, you will not be permitted to vote at the virtual meeting unless you first obtain a proxy issued in your name from the record holder.

### **Broker Non-Votes**

Broker non-votes are shares held by brokers, banks or other nominees who are present in person or represented by proxy, but which are not voted on a particular matter because the brokers, banks or nominees do not have discretionary authority with respect to that proposal and they have not received 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 to be considered at the Annual Meeting is the ratification of the appointment of the Company’s independent registered public accountants. The remaining proposals are considered to be non-routine matters. ***As a result, if you do not provide your brokers or nominees with voting instructions on these non-routine matters, your shares will not be voted on these proposals.***

## Voting Matters

Stockholders are entitled to cast one vote per share of common stock on each matter presented for consideration by the stockholders. 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 executive offices of the Company for a period of at least 10 days preceding the day of the Annual Meeting.

There are four proposals scheduled to be voted on at the Annual Meeting:

1. To elect Alison Tjosvold Milhous as a Class I director to hold office until the 2024 Annual Meeting of Stockholders and until her successor is elected and qualified;
2. To ratify the appointment of Mayer Hoffman McCann P.C. as our independent registered public accounting firm for the fiscal year ending March 31, 2022;
3. To approve, on a non-binding advisory basis, the compensation of our named executive officers; and
4. To approve an amendment and restatement of our Amended and Restated 2012 Equity Incentive Plan (the "Plan").

Our Board of Directors recommends a vote **FOR** the director nominee and **FOR** proposals 2, 3 and 4 listed above.

We are currently unaware of any matters to be raised at the Annual Meeting other than those referred to in this Proxy Statement. If other matters are properly presented at the Annual Meeting for consideration and you have submitted your proxy, the persons named in your proxy will have the discretion to vote on those matters for you.

## Votes Required

### *Proposal 1 – Election of Director*

Under our certificate of incorporation, as amended (the "Certificate of Incorporation"), and bylaws, as amended (the "Bylaws"), the Class I director will be elected by a plurality of the votes cast in person or by proxy at the Annual Meeting assuming a quorum is present. If you hold your shares through a broker and you do not instruct the broker on how to vote on this proposal, your broker will not have authority to vote your shares. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum, but will not have any effect on the outcome of the proposal.

Because this is an uncontested election of directors, Ms. Milhous will be elected to the Board under the plurality voting standard if she receives any vote "FOR" her election.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR AND SOLICITS PROXIES IN FAVOR OF THE ELECTION OF ALISON TJOSVOLD MILHOUS AS A CLASS I DIRECTOR.**

### *Proposal 2 – Ratification of Independent Registered Public Accounting Firm*

If a quorum is present, the affirmative vote of a majority of the votes cast at the Annual Meeting is required for ratification of our independent registered public accounting firm. Abstentions 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.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE RATIFICATION OF MAYER HOFFMAN MCCANN P.C. AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING MARCH 31, 2022.**

***Proposal 3 – Advisory Vote to Approve Compensation of Named Executive Officers***

If a quorum is present, the proposal to approve, on an advisory basis, the compensation of the Company's named executive officers requires the affirmative vote of a majority of the votes cast at the Annual Meeting. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum. Abstentions and 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.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE APPROVAL, ON AN ADVISORY BASIS, OF THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS.**

***Proposal 4 – Vote to Approve An Amendment and Restatement of the Amended and Restated 2012 Equity Plan to Increase the Number of Shares Authorized for Issuance Thereunder by 900,000 Shares and to eliminate provisions that were included for the purpose of permitting awards to qualify for the performance-based compensation exemption under Section 162(m) of the Internal Revenue Code of 1986, as Amended (the "Code")***

If a quorum is present, the proposal to approve an amendment and restatement of the Plan to increase the number of shares authorized for issuance thereunder by 900,000 shares and to eliminate provisions that were included for the purpose of permitting awards to qualify for the performance-based compensation exemption under Section 162(m) of the Code requires the affirmative vote of a majority of the votes cast at the Annual Meeting. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum. Abstentions and 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.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE APPROVAL OF AN AMENDMENT AND RESTATEMENT OF THE AMENDED AND RESTATED 2012 EQUITY PLAN TO INCREASE THE NUMBER OF SHARES AUTHORIZED FOR ISSUANCE THEREUNDER BY 900,000 SHARES AND TO ELIMINATE PROVISIONS THAT WERE INCLUDED FOR THE PURPOSE OF PERMITTING AWARDS TO QUALIFY FOR THE PERFORMANCE-BASED COMPENSATION EXEMPTION UNDER SECTION 162(M) OF THE CODE.**

**Voting Instructions**

If you are a stockholder of record, you can vote in the following ways:

- **By Internet:** by following the internet voting instructions included on the Notice of Internet Availability of Proxy Materials and the proxy card at any time up until 11:59 p.m., Eastern Time, on September 13, 2021.
- **By Telephone:** by following the telephone voting instructions included on the Notice of Internet Availability of Proxy Materials and the proxy card at any time up until 11:59 p.m., Eastern Time, on September 13, 2021.
- **By Mail:** you may vote by mail by marking, dating and signing your proxy card in accordance with the instructions on it and returning it by mail in the pre-addressed reply envelope provided with the proxy materials. The proxy card must be received prior to the Annual Meeting.

You may also vote your shares during the virtual Annual Meeting. Even if you plan to attend the virtual Annual Meeting, we encourage you to vote in advance by internet, telephone or mail so that your vote will be counted in the event you later decide not to attend the virtual Annual Meeting.

If you hold shares through a bank or broker, please refer to your proxy card, Notice or other information forwarded by your bank or broker to see which voting options are available to you.

## **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. If a stockholder does not indicate a choice on the proxy card, the shares will be voted: (i) in favor of the election of the director nominee contained in this Proxy Statement, (ii) in favor of ratifying Mayer Hoffman McCann P.C. as the Company's independent registered public accounting firm for the fiscal year ending March 31, 2022, (iii) in favor of the non-binding advisory vote on the compensation of our named executive officers, and (iv) in favor of the amendment and restatement of the Plan to increase the number of shares authorized for issuance thereunder by 900,000 shares and to eliminate provisions that were included for the purpose of permitting awards to qualify for the performance-based compensation exemption under Section 162(m) of the Code; and in the discretion of the proxy holders on any other matter that comes before the meeting.

If your shares are held by a broker, bank or other stockholder of record, in nominee name or otherwise, 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 Proposal 2 to ratify the appointment of Mayer Hoffman McCann P.C. as our independent registered public accounting firm, but will not be permitted to vote your shares with respect to Proposal 1, the election of the Class I director, Proposal 3, the non-binding advisory vote on the compensation of our named executive officers, or Proposal 4, the amendment and restatement of the Plan to increase the number of shares authorized for issuance thereunder by 900,000 shares and to eliminate provisions that were included for the purpose of permitting awards to qualify for the performance-based compensation exemption under Section 162(m) of the Code, 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 at the virtual meeting unless you first receive materials necessary to access the Annual Meeting from the record holder.

## **Proxy Revocation Procedure**

If you are a stockholder of record, you may revoke your proxy: (i) by written notice of revocation mailed to and received by the Secretary of the Company prior to the date of the Annual Meeting, (ii) by voting again via the internet or by telephone at a later time before the closing of those voting facilities at 11:59 p.m. (Eastern Time) on September 13, 2021, (iii) by executing and delivering to the 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 11:59 p.m. (Eastern Time) on September 13, 2021), or (iv) by virtually attending the Annual Meeting and voting electronically by going to [www.virtualshareholdermeeting.com/ONVO2021](http://www.virtualshareholdermeeting.com/ONVO2021) and using your unique control number that was included in the Proxy Materials that you received in the mail. Attendance at the virtual Annual Meeting will not in and of itself revoke a proxy.

If your shares are held by a bank, broker or other agent, you may change your vote by submitting new voting instructions to your bank, broker or other agent, or by referring to your proxy card, Notice or other information forwarded by your bank or broker.

## **Voting Results**

We will announce preliminary voting results at the Annual Meeting. We will report final results in a Current Report on Form 8-K filed with the SEC within four business days after the Annual Meeting. If final voting results are not available to us in time to file a Form 8-K with the SEC within four business days after the Annual Meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

## **Interests of Officers and Directors in Any Matters to be Acted Upon at the Annual Meeting**

Ms. Milhous has an interest in Proposal 1, the election of Ms. Milhous as a Class I director, as Ms. Milhous is currently a member of the Board. Members of the Board and our executive officers do not have any interest in Proposal 2, the ratification of the appointment of Mayer Hoffman McCann P.C. as our independent registered public accounting firm. Our named executive officers have an interest in Proposal 3, as the compensation for our named executive officers is subject to this vote. Members of the Board and our executive officers are eligible to receive awards under the terms of the Plan, and they therefore have an interest in Proposal 4.

## PROPOSAL 1: ELECTION OF DIRECTOR

### *General*

Our Certificate of Incorporation and Bylaws provide for a classified Board consisting of three classes of directors with staggered three-year terms. The Board currently consists of five directors, having terms expiring at the respective annual meetings of stockholders listed below:

2021 Annual Meeting	2022 Annual Meeting	2023 Annual Meeting
Alison Tjosvold Milhous	Douglas Jay Cohen	Keith E. Murphy
	David Gobel	Adam Stern

### *Proposal to Elect One Director to Hold Office for Three Years until the 2024 Annual Meeting*

The Board is recommending, and has nominated for election at the Annual Meeting, the following slate of one nominee to hold office for three years until the 2024 Annual Meeting of Stockholders and until her successor is duly elected and qualified.

Name	Age	Director Since	Principal Occupation	Experience/Qualifications	Current Committee Membership	Independent?
Alison Tjosvold Milhous	42	2020	Executive Director of SEC and Accounting; Internal Controls, Erasca, Inc.	Finance; and Industry	- Audit Committee - Nominating and Corporate Governance Committee	Yes

The nominee is currently serving as a director and has indicated her willingness to serve if elected, but if she should be unable or unwilling to stand for election, the shares represented by proxies may be voted for a substitute as the Board of Directors may designate, unless a contrary instruction is indicated in the proxy.

### *Additional Information*

For additional information about the nominee and each of the other directors serving on our Board, please see pages 21-23 in this Proxy Statement.

### *Vote Required*

Under our Certificate of Incorporation and Bylaws, the Class I director will be elected by a plurality of the votes cast in person or by proxy at the Annual Meeting assuming a quorum is present. If you hold your shares through a broker and you do not instruct the broker on how to vote on this proposal, your broker will not have authority to vote your shares. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum, but will not have any effect on the outcome of the proposal.

Because this is an uncontested election of directors, Ms. Milhous will be elected to the Board under the plurality voting standard if she receives any votes "FOR" her re-election.

### *Board Recommendation*

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR AND SOLICITS PROXIES IN FAVOR OF THE ELECTION OF ALISON TJOSVOLD MILHOUS.**

Unless otherwise instructed, it is the intention of the persons named as proxy holders in the proxy card to vote shares represented by properly executed proxy cards for the election of Alison Tjosvold Milhous.

## PROPOSAL 2: RATIFICATION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

At the Annual Meeting, our stockholders will be asked to ratify the appointment of Mayer Hoffman McCann P.C. (“MHM”) as our independent registered public accounting firm for the fiscal year ending March 31, 2022. Representatives of MHM are expected to be present at the virtual Annual Meeting and will have the opportunity to make statements if they desire to do so and to respond to appropriate questions. MHM has served as our independent registered public accounting firm since February 8, 2011, the date we completed our reverse merger transaction and became a public reporting company.

In the event our stockholders fail to ratify the appointment of MHM, the Audit Committee of the Board (the “Audit Committee”) will reconsider its selection. In addition, even if our stockholders ratify the selection, the Audit Committee in its discretion may direct the appointment of a different independent registered public accounting firm at any time during the year if it believes that a change would be in the best interests of the Company and its stockholders.

### *Audit and Non-Audit Fees*

Our Audit Committee is responsible for, and has approved, the engagement of MHM as our independent registered public accounting firm for the fiscal year ending March 31, 2022. Substantially all of MHM’s personnel, who work under the control of MHM’s shareholders, are employees of wholly owned subsidiaries of CBIZ, Inc., which provides personnel and various services to MHM in an alternative practice structure.

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

The following table sets forth the fees for services provided and billed by MHM and its associated entity CBIZ MHM, LLC, relating to Fiscal 2021 and Fiscal 2020.

	Fiscal Year 2021	Fiscal Year 2020
Audit fees	\$ 312,029	\$ 346,955
Audit-related fees	—	—
Tax fees	31,027	40,000
All other fees	—	—
Total	<u>\$ 343,056</u>	<u>\$ 386,955</u>

*Audit Fees:* For the fiscal years ended March 31, 2021 and 2020, the aggregate audit fees billed by our 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 fiscal years ended March 31, 2021 and 2020, there were no audit-related fees billed by our independent auditors, other than the fees described above.

*Tax Fees:* For the fiscal years ended March 31, 2021 and 2020, the tax-related fees billed by an associated entity of our independent auditors pertained to services related to tax return preparation and tax planning services.

*All Other Fees:* For the fiscal years ended March 31, 2021 and 2020, 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 MHM 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.

***Vote Required***

If a quorum is present, the affirmative vote of a majority of the votes cast at the Annual Meeting is required for ratification of our independent registered public accounting firm. Abstentions will 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.

Although ratification is not required by our Bylaws or otherwise, the Board is submitting this proposal as a matter of good corporate governance. If stockholders do not ratify the appointment of MHM, the Audit Committee and the Board would consider what, if any, action to take. Even if the appointment is ratified, the Audit Committee, in its discretion, may direct the appointment of a different independent audit firm at any time during the fiscal year if it is determined that such a change would be in the best interests of Organovo and its stockholders.

***Board Recommendation***

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE RATIFICATION OF MAYER HOFFMAN MCCANN P.C. AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING MARCH 31, 2022.**



### **PROPOSAL 3: ADVISORY VOTE TO APPROVE COMPENSATION OF NAMED EXECUTIVE OFFICERS**

The Board is providing stockholders with the opportunity to cast an advisory vote on the compensation of our named executive officers. This proposal, commonly known as a “Say-on-Pay” proposal, gives you, as a stockholder, the opportunity to endorse or not endorse our executive compensation program and the compensation paid to our named executive officers as reported in this Proxy Statement.

The Say-on-Pay vote is advisory, and therefore not binding on the Compensation Committee or the Board. Although the vote is non-binding, the Compensation Committee and the Board will review the voting results, seek to determine the cause or causes of any significant negative voting, and take them into consideration when making future decisions regarding executive compensation.

The Compensation Committee and the Board have designed our executive compensation program to attract and retain talented executives, to motivate them to achieve our key financial, operational, and strategic goals, and to reward them for superior performance. They also designed our compensation program to align our executive officers’ interests with those of our stockholders by rewarding their achievement of the specific corporate and individual goals approved by our Compensation Committee. The performance goals set by the Compensation Committee are focused on achieving our commercialization objectives, increasing long-term stockholder value, and advancing our product development and technology platform. Stockholders are encouraged to read the “Executive Compensation” section of this Proxy Statement for a more detailed discussion of how our compensation program reflects the Company’s core objectives and aligns our executive officers’ interests with those of our stockholders.

#### ***Vote Required***

The Board believes the Company’s executive compensation program uses appropriate structures and sound pay practices that are effective in achieving our core compensation objectives. Accordingly, the Board recommends that you vote in favor of the following resolution:

“RESOLVED, that the stockholders of Organovo Holdings, Inc. approve, on an advisory basis, the compensation of the Company’s named executive officers as disclosed in the Company’s 2021 Proxy Statement pursuant to the Securities and Exchange Commission’s compensation disclosure rules, including the Executive Compensation section.”

If a quorum is present, the proposal to approve, on an advisory basis, the compensation of the Company’s named executive officers requires the affirmative vote of a majority of the votes cast at the Annual Meeting. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum. Abstentions and 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.

#### ***Board Recommendation***

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE APPROVAL, ON AN ADVISORY BASIS, OF THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS.**

**PROPOSAL 4: AMENDMENT AND RESTATEMENT OF THE AMENDED AND RESTATED 2012  
EQUITY INCENTIVE PLAN**

**TO INCREASE NUMBER OF AUTHORIZED SHARES FOR ISSUANCE THEREUNDER BY 900,000  
SHARES AND TO ELIMINATE PROVISIONS THAT WERE INCLUDED FOR THE PURPOSE OF  
PERMITTING AWARDS TO QUALIFY FOR THE PERFORMANCE-BASED COMPENSATION  
EXEMPTION UNDER SECTION 162(M) OF THE CODE**

At the Annual Meeting, our stockholders will be asked to approve an amendment and restatement of the Plan to increase the number of shares authorized for issuance thereunder by 900,000 shares and to eliminate provisions that were included for the purpose of permitting awards to qualify for the performance-based compensation exemption under Section 162(m) of the Code.

As of July 19, 2021, excluding the requested share reserve increase, 84,471 shares remain available for issuance under the Plan and 900,444 shares were subject to outstanding awards under the Plan.

On July 29, 2021, the Compensation Committee approved an amendment and restatement of the Plan to provide for, and we are submitting to our stockholders for approval, an amendment and restatement of the Plan to increase the maximum number of shares authorized for issuance under the Plan by 900,000 shares from 1,427,699 shares to 2,327,699 shares and to eliminate provisions that were included for the purpose of permitting awards to qualify for the performance-based compensation exemption under Section 162(m) of the Code (the “Amended Plan”). If the Amended Plan is approved by our stockholders at the Annual Meeting, it will be effective as of September 14, 2021, the date of stockholder approval. In the event that our stockholders do not approve this Proposal 4, the Amended Plan will not become effective and the Plan will continue in effect subject to its existing terms.

***Key Features Designed to Protect Stockholders’ Interests***

We believe the Amended Plan’s design reflects our commitment to strong corporate governance and our desire to preserve stockholder value as demonstrated by the following Plan features:

- **Independent Administrator.** The Compensation Committee, which is comprised solely of independent, non-employee directors, is the Plan administrator.
- **No Evergreen Feature.** The Plan expires by its terms on a specified date. In addition, the maximum number of shares available for issuance under the Plan is fixed and cannot be increased without stockholder approval. This is why we are requesting stockholder approval for the Amended Plan.
- **No Discount Awards; Maximum Term Specified.** Stock options and stock appreciation rights must have an exercise price or base price no less than the closing price of our common stock on the date the award is granted and a term no longer than ten years’ duration.
- **Per-Participant Limits on Awards.** The Plan limits the size of awards that may be granted during any one year to any one participant.
- **Award Design Flexibility.** Different kinds of awards may be granted under the Plan, giving us the flexibility to design our equity incentives to complement the other elements of compensation and to support our attainment of strategic goals.
- **Performance-Based Awards.** The Plan permits the grant of performance-based stock awards that are payable only upon the attainment of specified performance criteria. In the event the Company declares a dividend or dividend equivalent payment, participants who hold performance-based awards subject to performance goals will not be eligible to receive any dividend or dividend equivalent unless the applicable performance goals are met and the underlying award vests.

- **No Liberal Definition of Change in Control.** The Plan's definition of a change-in-control transaction provides that any award benefits triggered by such a transaction are contingent upon the actual consummation of the transaction, not merely its approval by our Board or stockholders.
- **Repricing, Reloading, and Exchanges Prohibited.** The Plan requires stockholder approval for any repricing, replacement, or buyout of underwater awards and no new awards will be granted automatically upon the exercise or settlement of any outstanding award. Outstanding awards may not be surrendered in exchange for awards of the same type (which may have had lower exercise prices or different terms), awards of a different type and/or cash.
- **Clawback.** The Plan provides that all awards granted under the Amended Plan will be subject to any clawback or recoupment policy adopted by the Company, unless otherwise specified in the award agreement or determined by the Plan administrator in its sole discretion.
- **Re-issuance of Shares.** The Plan provides that any (i) shares withheld by the Company or tendered to the Company to pay taxes and/or the exercise price of an award under the Amended Plan and (ii) unvested shares of restricted stock, restricted stock units, performance shares or performance units that are repurchased by the Company will not become available for future grant under the Amended Plan.
- **Limited Transferability.** Generally, a participant may not transfer an award granted under the Amended Plan other than by will, the laws of descent and distribution.

#### **Equity Incentive Plan Information**

All references in this section to shares, equity and awards issued prior to August 18, 2020 give effect to the 1-for-20 reverse stock split completed by us on August 18, 2020.

As of July 19, 2021, there were (i) 879,533 shares issuable upon exercise of outstanding stock options, (ii) 20,911 shares subject to outstanding restricted stock units, and (iii) 84,471 shares of common stock available for future awards under the Plan. The closing price of a share of our common stock, as reported on the Nasdaq Capital Market, on July 19, 2021 was \$7.40 per share.

The Compensation Committee authorized and issued equity awards for an aggregate of 455,000 shares of common stock under the Plan during Fiscal 2021, including restricted stock units for an aggregate of 20,000 shares of common stock issued to the Company's executive officers as a component of their compensation for Fiscal 2021. During our fiscal year ending March 31, 2022 ("Fiscal 2022") through the date of this Proxy Statement, the Compensation Committee has not authorized and issued any equity awards to the Company's executive officers.

The number of shares available for future issuance following the approval of the Amended Plan, when divided by the Company's three-year average number of shares issued under the Plan for fiscal years 2021, 2020, and 2019 provides an estimated duration of approximately two years.

The following table provides detailed information regarding the activity related to the Plan for fiscal years 2021, 2020 and 2019:

	Fiscal Year 2021	Fiscal Year 2020	Fiscal Year 2019
Total number of shares of common stock subject to stock options granted	751,875	17,125	352,466
Total number of shares of common stock subject to full value awards granted (i.e., restricted stock units)	20,000	330,686	87,781
Weighted-average number of shares of common stock outstanding	6,902,000	6,477,808	5,768,995
Burn Rate <sup>(1)</sup>	11%	5%	8%
Overhang <sup>(2)</sup>	12%	18%	20%

(1) Burn Rate is calculated as (shares subject to options granted plus the number of shares subject to other equity incentive awards granted)/weighted average common stock outstanding.

(2) Overhang is calculated by dividing the sum of (x) the number of shares subject to equity awards outstanding at the end of the fiscal year and (y) the number of shares available for future grants, by the number of shares outstanding at the end of the fiscal year.

Currently, the shares available for issuance and number of awards outstanding under the Plan (which excludes the shares available for issuance and number of awards outstanding under our 2021 Inducement Equity Plan (the “Inducement Plan”)) as a percentage of the Company’s fully diluted common stock as of July 19, 2021 is 11%. If the proposal is approved by our stockholders, the potential dilution to stockholders would increase by 10% to 21%.

Currently, the shares available for issuance and number of awards outstanding collectively under the Plan, the ESPP, and the Inducement Plan as a percentage of the Company’s fully diluted common stock as of July 19, 2021 is 13%. If the proposal is approved by our stockholders, the potential dilution to stockholders would increase by 10% to 23%.

The total aggregate equity value of the additional authorized shares being requested under the Amended Plan (above the shares currently remaining available for issuance under the Plan), based on the closing price of our common stock on the Record Date, is \$6,660,000.

### **Rationale for Amendment**

The Company grants equity awards to its eligible executive officers, directors and employees in the ordinary course of business. The ability to continue to grant equity compensation is vital to our ability to continue to attract and retain employees in the competitive labor markets in which we compete, and the Compensation Committee has determined that the proposed increased size of the share reserve under the proposed Amended Plan is reasonable and appropriate at this time.

The Company performed an analysis based on its current hiring plans and determined that, if the proposed increase in the shares reserved under the Amended Plan is approved by stockholders at the Annual Meeting, it should have enough shares available for future grant under the Amended Plan to last through September 2023. However, future circumstances may require us to change our current equity grant practices. If the proposed increase to the share reserve is approved, the share reserve under the Amended Plan could last for a longer or shorter period of time, depending upon our future equity grant practices, which we cannot predict with any degree of certainty at this time. The Company discussed the proposed increase in shares with its compensation consultant and received input on the appropriate number of shares to be added to the Amended Plan. If this proposal is not approved by our stockholders, the Company currently anticipates that all of the shares available for grants under the Plan will be exhausted by approximately December 2021.

The Compensation Committee has full discretion to determine the number of awards to be granted to participants under the Amended Plan, subject to an annual limitation on the total number of awards that may be granted to any one person. No awards have been granted contingent upon stockholder approval of the Amended Plan.

In addition, Section 162(m) disallows public companies a tax deduction for federal income tax purposes of compensation in excess of \$1 million paid to their chief executive officer, the chief financial officer and three other

most highly compensated executive officers in any taxable year. The exemption from the Section 162(m) deduction limit for performance-based compensation was repealed, effective for taxable years beginning after December 31, 2017, such that compensation paid to our covered officers in excess of \$1 million will generally not be deductible unless it qualifies for transition relief applicable to certain arrangements in place as of November 2, 2017. In light of this, the Amended Plan eliminates provisions that were included solely for the purpose of permitting awards to qualify for the performance-based compensation exemption under Section 162(m).

### ***Description of Material Terms of Amended Plan***

The following is a summary of the principal features of the Plan, as proposed to be amended by the Amended Plan, but it is qualified in its entirety by reference to the full text of the Amended Plan, which appears as Appendix A to this Proxy Statement.

### ***Background and Purpose of the Plan***

We adopted the Plan to attract and retain the best available personnel for positions of substantial responsibility, to provide incentives to individuals who perform services for us, and to promote the success of our business.

### ***Shares Available Under the Plan***

Currently, there are 1,427,699 shares of common stock reserved for issuance under the Plan. The Amended Plan would increase the number of shares available for issuance by 900,000 shares, for an aggregate of 2,327,699 shares of common stock. If an incentive award granted under the Plan expires, terminates, is unexercised or is forfeited, the shares subject to such award will become available for further awards under the Plan. Under the Plan, shares are surrendered to us in connection with an incentive award, and shares used to pay the tax or exercise price of an award will not 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, the cash payment will not result in reducing the number of shares available for issuance under the Plan. The maximum number of shares subject to awards that may be granted to any individual during any calendar year is 400,000 (subject to adjustment for stock splits, reverse stock splits, stock dividends and similar transactions) 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.

### ***Administration***

The Compensation Committee currently administers the Plan (the “Administrator”). Subject to the terms of the Plan, the Compensation Committee has complete authority and discretion to determine the terms of awards under the Plan.

### ***Eligibility and Participation***

Our equity incentive program is broad-based. Participation in the Plan is open to all of our employees and directors and any person (including an advisor) engaged by us to render services to the Company, as the Administrator may select from time to time. As of the date of this Proxy Statement, five directors (including our Executive Chairperson) and approximately ten employees (including two other executive officers) and approximately 13 active consultants (including one other executive officer) and other persons rendering services to the Company or any of its affiliates are eligible to participate in the Plan.

### ***Grants***

The Plan authorizes the grant to 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, 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 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 (e.g., the Nasdaq Capital Market), 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. As of July 19, 2021, the fair market value of a share of our common stock was \$7.40 per share, which was the closing price of our common stock, as reported on the Nasdaq Capital Market, on such date. 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 may qualify for incentive stock option treatment. Each stock option shall expire at such time as the Administrator shall determine at the time of grant, although 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 as determined by the Administrator and set forth in the applicable award agreement. 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 the Company 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 vesting requirements, 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 representing the value of a share of our common stock at a future date after the lapse of restrictions or achievement of performance criteria or other conditions determined by the Administrator. Participants are not required to pay any consideration to us at the time of grant of restricted stock or restricted stock units.

**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 criteria 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 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. The performance stock/units may provide for an 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, or other criteria determined by the Administrator: (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; (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 Compensation Committee consistent with the terms of the Plan. Performance criteria may be expressed on an absolute basis or relative to a standard specified by the Compensation Committee

As described below in “Federal Income Tax Consequences”, the exception from the Section 162(m) \$1.0 million deduction limit for qualified “performance-based” compensation paid to certain covered executive officers has been repealed, effective for taxable years beginning after December 31, 2017. Consequently, performance awards granted under the Plan will be subject to the \$1,000,000 limitation on the income tax deductibility of compensation paid to a covered employee imposed by Section 162(m) of the Code.

***Transferability of Awards.*** Generally, a participant may not transfer an award granted under the Plan other than by will or the laws of descent and distribution.

***Changes to Capital Structure.*** In the event there is a specified type of change in our capital structure not involving the receipt of consideration by us, such as a stock split, stock dividend, combination, recapitalization or reclassification, the number of shares reserved under the Amended Plan, the maximum number of shares with respect to one or more stock awards that may be granted to persons during any calendar year and the number of shares and exercise price, if applicable, of all outstanding stock awards will be appropriately adjusted.

***Change in Control.*** In the event of a merger of the Company with or into another corporation or entity or a change in control of the Company, outstanding awards will be treated as the Administrator determines, without the consent of any participant, including, without limitation:

- arrange for outstanding stock awards under the Plan to be assumed, continued or substituted for by the entity surviving the merger or change in control, or its parent or subsidiary, with appropriate adjustments as to the number and kind of shares and, if applicable, prices;
- upon written notice to the participants, provide that the awards will terminate upon or immediately prior to the merger or change in control;
- accelerate in part or in full the vesting provisions of stock awards held by participants and to the extent determined by the Administrator, terminate upon or immediately prior to the merger or change in control;
- arrange or otherwise provide for the payment of cash and/or other consideration to participants in exchange for the satisfaction and cancellation of outstanding awards; or
- any combination of the foregoing.

In the event that an award outstanding under the Plan is not exercised in full prior to consummation of a change in control in which the award is not being assumed, continued or substituted for, the award shall automatically terminate as of immediately prior to the consummation of the transaction. In the event that the entity surviving the change in control, or its parent or subsidiary, does not assume or substitute for a Plan participant's 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.

Under the Plan, a change in control generally includes:

- A change in the ownership of the Company that 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;
- 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; or
- A change in the ownership of a substantial portion of the Company’s assets that 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.

### New Plan Benefits and Previously Granted Awards

The number of awards that a participant may receive under the Plan, as amended by the proposed amendment and restatement, is in the discretion of the Administrator and therefore cannot be determined in advance. For illustrative purposes only, the following table sets forth the aggregate number of shares subject to equity awards granted under the Plan during the last fiscal year to (i) our named executive officers, (ii) all current executive officers (including our Executive Chairperson), as a group, (iii) all directors who are not executive officers, as a group, and (iv) all employees who are not executive officers, as a group (even if not currently outstanding).

Name of Individual or Group and Position	Number of Shares Subject to Options	Weighted-Average Per Share Exercise Price (\$)	Number of Shares Subject to Stock Awards	Dollar Value of Shares Subject to Stock Awards <sup>(1)</sup>
Keith Murphy, Executive Chairman	265,000	\$ 9.28	20,000	\$ 192,800
Thomas Jurgensen, General Counsel and Corporate Secretary	55,000	\$ 9.31	-	-
Jeffrey Miner, Chief Scientific Officer	125,000	\$ 8.17	-	-
Taylor Crouch, Former President and Chief Executive Officer(2)	-	-	-	-
Craig Kussman, Former Chief Financial Officer(2)	-	-	-	-
Jennifer Kinsbruner Bush, JD, Former SVP, General Counsel, Corporate Secretary and Compliance Officer(2)	-	-	-	-
All current executive officers, as a group (4 persons)	445,000	\$ 8.97	20,000	\$ 192,800
All current directors who are not current executive officers, as a group (4 persons)	140,000	7.64	-	-
All employees who are not current executive officers, as a group	74,375	\$ 8.24	-	\$ -

(1) Amounts reflect the fair value of the stock as of March 31, 2021, the last day of Fiscal 2021.

(2) Mr. Crouch, Mr. Kussman and Ms. Bush resigned effective September 15, 2020. As disclosed below under “Executive Compensation – Components of Executive Compensation – Equity-Based Incentive Awards”, during Fiscal 2021, the Compensation Committee and Board determined that it was in the best interests of the Company and its stockholders to not grant Mr. Crouch, Mr. Kussman or Ms. Bush any equity awards for their services during Fiscal 2021.

All other future grants under the Amended Plan are within the discretion of the Board of Directors and the benefits of such grants are, therefore, not determinable.



### ***Duration, Amendment, and Termination***

Unless sooner terminated by the Board, the Amended Plan will terminate on July 26, 2028. The Board may amend, alter, suspend or terminate the Amended 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.

### ***Federal Income Tax Consequences***

The following is a general summary under current law of the material federal income tax consequences to participants in the Plan. This summary deals with the general tax principles that apply and is provided only for general information. Some kinds of taxes, such as state, local and foreign income taxes and federal employment taxes, are not discussed. Tax laws are complex and subject to change and may vary depending on individual circumstances and from locality to locality. The summary does not discuss all aspects of income taxation that may be relevant in light of a holder's personal investment circumstances. This summarized tax information is not tax advice.

***Non-Qualified Stock Options.*** For federal income tax purposes, if an optionee is granted a non-qualified stock option under the Plan, the optionee will not have taxable income on the grant of the option, nor will we be entitled to any deduction. Generally, upon exercise of a non-qualified stock option, the optionee will recognize ordinary income, and we will be entitled to a deduction, in an amount equal to the excess of the fair market value of a common share over the option exercise price on the date each such option is exercised. The optionee's basis for the stock for purposes of determining gain or loss on subsequent disposition of such shares generally will be the fair market value of the common stock on the date the optionee exercises such option. Any subsequent gain or loss will be generally taxable as capital gains or losses.

***Incentive Stock Options.*** There is no taxable income to an optionee when an optionee is granted an incentive stock option ("ISO") or when that option is exercised. However, the amount by which the fair market value of the shares at the time of exercise exceeds the option price will be an "item of adjustment" for the optionee for purposes of the alternative minimum tax. Gain realized by the optionee on the sale of an ISO is taxable at capital gains rates, and no tax deduction is available to us, unless the optionee disposes of the shares within (a) two years after the date of grant of the option or (b) within one year of the date the shares were transferred to the optionee. If the common shares are sold or otherwise disposed of before the end of the two-year and one-year periods specified above, the excess of the fair market value of a common share over the option exercise price on the date of the option's exercise will be taxed at ordinary income rates (or, if less, the gain on the sale), and we will be entitled to a deduction to the extent the optionee must recognize ordinary income. If such a sale or disposition takes place in the year in which the optionee exercises the option, the income the optionee recognizes upon sale or disposition of the shares will not be considered an item of adjustment for alternative minimum tax purposes.

An ISO exercised more than three months after an optionee terminates employment, for reasons other than death or disability, will be taxed as a non-qualified stock option, and the optionee will recognize ordinary income on the exercise. We will be entitled to a tax deduction equal to the ordinary income, if any, realized by the optionee.

***Restricted Stock.*** An individual to whom restricted stock is issued generally will not recognize taxable income upon such issuance, and we generally will not then be entitled to a deduction, unless an election is made by the participant under Section 83(b) of the Code. However, when restrictions on shares of restricted stock lapse, such that the shares are no longer subject to a substantial risk of forfeiture, the individual generally will recognize ordinary income, and we generally will be entitled to a deduction for an amount equal to the excess of the fair market value of the shares at the date such restrictions lapse over the purchase price. If a timely election is made under Section 83(b) with respect to restricted stock, the participant generally will recognize ordinary income on the date of the issuance equal to the excess, if any, of the fair market value of the shares at that date over the purchase price of such shares, and we will be entitled to a deduction for the same amount.

***Share appreciation rights.*** A participant will not be taxed upon the grant of an SAR. Upon the exercise of the SAR, the participant will recognize ordinary income equal to the amount of cash or the fair market value of the stock

received upon exercise. At the time of exercise, we will be eligible for a tax deduction as a compensation expense equal to the amount that the participant recognizes as ordinary income.

***Other Stock Awards and Performance Awards.*** The participant will have ordinary income upon receipt of stock or cash payable under performance awards, dividend equivalents, restricted share units and stock payments. We will be eligible for a tax deduction as a compensation expense equal to the amount of ordinary income recognized by the participant.

***Section 162(m) of the Code.*** Prior to 2018, Section 162(m) of the Code generally limited to \$1.0 million the amount of non-performance-based remuneration the Company could deduct in any calendar year for certain executive officers. Effective January 1, 2018, the exemption from the Section 162(m) deduction limit for performance-based compensation was repealed, such that compensation paid to our covered officers in excess of \$1.0 million will generally not be deductible unless it qualifies for transition relief applicable to certain arrangements in place as of November 2, 2017. For grants under the Plan, we will not be able to take a deduction for any compensation in excess of \$1 million that is paid to a covered officer.

***Internal Revenue Code Section 409A Requirements.*** Certain awards under the Plan may be considered “nonqualified deferred compensation” for purposes of Section 409A of the Code (“Section 409A”), which imposes certain requirements on compensation that is deemed under Section 409A to involve nonqualified deferred compensation. Among other things, the requirements relate to the timing of elections to defer, the timing of distributions and prohibitions on the acceleration of distributions. Failure to comply with these requirements (or an exception from such requirements) may result in the immediate taxation of all amounts deferred under the nonqualified deferred compensation plan for the taxable year and all preceding taxable years, by or for any participant with respect to whom the failure relates, the imposition of an additional 20% income tax on the participant for the amounts required to be included in gross income and the possible imposition of penalty interest on the unpaid tax. Generally, Section 409A does not apply to incentive awards that are paid at the time the award vests. Likewise, Section 409A typically does not apply to restricted stock. Section 409A may, however, apply to incentive awards the payment of which is delayed beyond the calendar year in which the award vests. Treasury regulations generally provide that the type of awards provided under the Plan will not be considered nonqualified deferred compensation. However, to the extent that Section 409A applies to an award issued under the Plan, the Plan and all such awards will, to the extent practicable, be construed in accordance with Section 409A. Under the Plan, the Administrator has the discretion to grant or to unilaterally modify any award issued under the Plan in a manner that conforms with the requirements of Section 409A with respect to deferred compensation or voids any participant election to the extent it would violate Section 409A. The Administrator also has sole discretion to interpret the requirements of the Code, including Section 409A, for purposes of the Plan and all awards issued under the Plan.

## Equity Compensation Plan Information

The following table sets forth additional information with respect to the shares of common stock that may be issued upon the exercise of options and other rights under our existing equity compensation plans and arrangements in effect as of March 31, 2021. The information includes the number of shares covered by, and the weighted average exercise price of, outstanding options and the number of shares remaining available for future grant, excluding the shares to be issued upon exercise of outstanding options.

Plan Category	(A) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(B) Weighted-average exercise price of outstanding options, warrants and rights	(C) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (A))
Equity compensation plans approved by security holders <sup>(1)</sup>	933,531 <sup>(2)</sup>	\$ 15.45	123,194 <sup>(3)</sup>
Equity compensation plans not approved by security holders <sup>(4)</sup>	104,410 <sup>(5)</sup>	\$ 54.60	750,000 <sup>(6)</sup>
Total	1,037,941	\$ 19.39	873,194

(1) Comprised of our 2008 Equity Incentive Plan, the Plan and our 2016 Employee Stock Purchase Plan (the “ESPP”).

(2) Includes stock options to purchase 900,245 shares of common stock with a per share weighted-average exercise price of \$16.02. Also includes 21,057 restricted stock units and 12,229 performance-based restricted stock units with no exercise price, in all cases as of March 31, 2021.

(3) Comprised of 63,759 shares of common stock available for future awards under the 2012 Equity Plan and 59,435 shares of common stock available for purchase under the ESPP, in all cases as of March 31, 2021.

(4) Comprised of certain Inducement Award Stock Option Agreements and Inducement Award Performance-Based Restricted Stock Unit Agreements (the “Inducement Award Agreements”) and our 2021 Inducement Equity Plan (the “Inducement Plan”).

(5) Comprised of stock options to purchase 104,410 shares of common stock with a per share exercise price of \$54.60 pursuant to the Inducement Award Agreements granted to our former Chief Executive Officer upon commencement of his employment. While outside the Plan, the terms and conditions of the award pursuant to the Inducement Award Agreements are consistent with awards granted to our executive officers pursuant to the Plan.

(6) Comprised of 750,000 shares of common stock reserved for issuance pursuant to the Inducement Plan as of March 31, 2021.

## Vote Required

If a quorum is present, the proposal to approve an amendment and restatement of the Plan to increase the number of shares authorized for issuance thereunder by 900,000 shares and to eliminate provisions that were included for the purpose of permitting awards to qualify for the performance-based compensation exemption under Section 162(m) of the Code requires the affirmative vote of a majority of the votes cast at the Annual Meeting. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum. Abstentions and 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.

## Board Recommendation

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE APPROVAL OF AN AMENDMENT AND RESTATEMENT OF THE AMENDED AND RESTATED 2012 EQUITY PLAN TO INCREASE THE NUMBER OF SHARES AUTHORIZED FOR ISSUANCE THEREUNDER BY 900,000 SHARES AND TO ELIMINATE PROVISIONS THAT WERE INCLUDED FOR THE PURPOSE OF PERMITTING AWARDS TO QUALIFY FOR THE PERFORMANCE-BASED COMPENSATION EXEMPTION UNDER SECTION 162(M) OF THE CODE.**

## BOARD OF DIRECTORS INFORMATION

Our Board of Directors is comprised of five directors. Our Board is divided into three classes, with one class standing for election each year for a three-year term. There is currently one Class I director, two Class II directors, and two Class III directors. Our Class I director, whose term will expire at our Annual Meeting, is Alison Tjosvold Milhous.

The Board has nominated Alison Tjosvold Milhous for election at the Annual Meeting as a Class I director, for a three-year term expiring at the 2024 Annual Meeting of Stockholders. Directors are elected by a plurality of the votes cast at the Annual Meeting. Because this is an uncontested election of directors, Ms. Milhous will be elected to the Board under the plurality voting standard if she receives any vote “FOR” her election. Ms. Milhous has indicated her willingness to serve if elected, but if she 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.

In addition to the information set forth below regarding our directors and our director candidate and the skills that led our Board to conclude that these individuals should serve as directors, we also believe that all of our directors and director nominee have a reputation for integrity, honesty and adherence to the highest ethical standards. We believe they each have demonstrated business acumen and an ability to exercise sound judgment, as well as a commitment of service to our Company and to their Board duties.

### Information About Our Directors

The following sets forth information regarding the business experience of our director nominees and our current directors:

Name	Age <sup>(1)</sup>	Position(s)
Keith Murphy	49	Director and Executive Chairman
Adam Stern	57	Director
Douglas Jay Cohen	50	Director
David Gobel	68	Director
Alison Tjosvold Milhous	42	Director

(1) As of July 29, 2021.

### *Nominee as Class I Director Continuing in Office until the 2024 Annual Meeting of Stockholders*

**Alison Tjosvold Milhous, Director**, has served on our Board since September 2020. She has 20 years of audit and technical accounting experience and is a certified public accountant. She is currently the Executive Director of SEC and Internal Controls at Erasca, Inc., a clinical-stage precision oncology company. Prior to joining Erasca, she was an independent consultant assisting public and private companies with accounting and reporting needs primarily within the life sciences and technology industries. Ms. Milhous was previously an audit partner at Grant Thornton LLP from August 2015 through September 2019 and held various positions with increasing responsibility at Grant Thornton from June 2002 as an audit associate through July 2015 as an audit senior manager. She began her career in June 2000 at Arthur Andersen LLP. Ms. Milhous served on the membership committee of Athena San Diego, a professional women’s leadership organization with a STEM focus, from August 2012 through September 2019 and was on the Pinnacle steering committee from September 2013 through April 2015. Ms. Milhous received a Bachelor of Science degree in Business Administration with a dual concentration in Accounting and Finance from California State Polytechnic University, San Luis Obispo.

We believe Ms. Milhous’ extensive financial and accounting experience and her experience providing audit and consulting services to life sciences companies qualify her to serve as a member of our Board.

### ***Class II Directors Continuing in Office Until the 2022 Annual Meeting of Stockholders***

**Douglas Jay Cohen, Director**, has served on our Board since September 2020. He has served as president and Chief Executive Officer of IR Medtek LLC since January 2019, a medical device company developing a non-invasive probe for cancer detection by primary care physicians using a technology licensed from the Ohio State University. Prior to IR Medtek, Mr. Cohen served as President and Chief Executive Officer of Beacon Street Innovations, an advanced technology printing company from September 2016 to present. From January 1994 to September 2016, Mr. Cohen served as Vice President of Operations and Engineering at Screen Machine Industries, an industrial and construction heavy equipment manufacturer. As an active investor in startup companies, Mr. Cohen has invested in more than 20 biotech startups in the past 10 years, including investing in Organovo in 2013 and maintaining a position in the company ever since. Mr. Cohen received a B.S. from the Massachusetts Institute of Technology.

We believe Mr. Cohen's experience in the life sciences industry, his experience in managing emerging growth companies and his experience in developing business strategies qualifies him to serve as a member of our Board.

**David Gobel, Director**, has served on our Board since September 2020. He has served as Chief Executive Officer of Methuselah Fund LLC since December 2016 and as Chief Executive Officer of Methuselah Foundation since September 2001, promoting increasing the healthy human lifespan by various means including: performance prizes, targeted grant making, education, and the creation/funding of biotech startups. Mr. Gobel became Chief Venture Strategist at Transportation Security Administration from January 2009 until March 2013, where he was responsible for strategic planning, innovation management and creation of a novel Venture Capital capability for TSA and then Department of Homeland Security by partnering with In-Q-Tel. Mr. Gobel was a member of the board of Volumetric Biotechnologies, a company that focuses on the development of bioholographic human tissue printing, from April 2018 to January 2020. Since July 2018, Mr. Gobel served as member of the board for Turn Bio, and since May 2020 as chairman of the board of Turn Bio. Mr. Gobel has served as a board member of Leucadia Therapeutics since October 2015, and as an independent founding board member of Oisin Therapeutics since December 2014.

We believe Mr. Gobel's previous services as chief executive officer for other biotechnology companies, his experience and expertise with human tissue printing companies and his extensive board experience qualify him to serve as a member of our Board.

### ***Class III Directors Continuing in Office Until the 2023 Annual Meeting of Stockholders***

**Keith Murphy, Director and Executive Chairman**, re-joined our Board in July 2020 and has served as our Executive Chairman since September 2020. Mr. Murphy is the Chief Executive Officer and Chairman of Viscient Biosciences, Inc. ("Viscient"), a private company that he founded in 2017 that is focused on drug discovery and development utilizing 3D tissue technology and multi-omics (genomics, transcriptomics, metabolomics). Mr. Murphy previously served as the President and Chief Executive Officer of Organovo from February 2012 through April 2017, and as Chairman from February 2012 through August 2017. Mr. Murphy also previously served as President, Chief Executive Officer, and Chairman of Organovo, Inc., Organovo's primary operating company prior to its going-public transaction, from August 2007 to February 2012. Prior to founding Organovo, Mr. Murphy served in various roles at Amgen, Inc. from August 1997 to July 2007 including as Global Operations Leader for the osteoporosis/bone cancer drug Prolia/Xgeva (denosumab). Prior to joining Amgen, Mr. Murphy served at Alkermes, Inc., a biotechnology company, from July 1993 to July 1997, where he played a role on the development team for their first approved product, Nutropin (hGH) Depot. Mr. Murphy has served as a member of the board of directors of Kintara Therapeutics, Inc. since August 2020, and serves on its compensation committee and nominating and corporate governance committee. He holds a B.S. in Chemical Engineering from MIT and is an alumnus of the UCLA Anderson School of Management.

We believe Mr. Murphy's previous experience in the biotechnology field, especially in developing novel products, his experience and expertise with our 3D bioprinting technology and product development opportunities and strategy, and his educational experience qualify him to be a member of our Board of Directors.

**Adam Stern, Director**, re-joined our Board in July 2020. Mr. Stern is currently the Chief Executive Officer of SternAegis Ventures, the management team within Aegis Capital Corp. responsible for venture capital and private equity financing, and has been the Head of Private Equity Banking at Aegis Capital Corp., a full-service investment banking firm, since December 2012. Prior to SternAegis, Mr. Stern served as Senior Managing Director at Spencer Trask Ventures, Inc., a private equity and venture firm, from 1997 to 2012, where he managed the structured finance group focusing primarily on technology and life sciences companies. From 1989 to 1997, Mr. Stern was at Josephthal & Co., Inc., Members of the New York Stock Exchange, where he served as Head of Private Equity and Managing Director. He has been a FINRA licensed securities broker since 1987 and a Registered General Securities Principal since 1991. Mr. Stern previously served as a director of Organovo from February 2012 to June 2013. Mr. Stern is a current director at DarioHealth Corp. (Nasdaq: DRIO) and privately held Aerami Therapeutics Holdings Inc. and Western Acquisition Ventures Corp. Mr. Stern is a former director of Adgero Biopharmaceuticals Holdings, Matinas BioPharma Holdings, Inc. (NYSE: MTNB), Hydrofarm Holdings Group Inc. (Nasdaq: HYFM), In Vivo Therapeutics, Inc. (Nasdaq: NVIV) and PROLOR Biotech prior to its sale in 2013 to Opko Health, Inc. (Nasdaq: OPK). Mr. Stern graduated with a Bachelor of Arts degree from the University of South Florida in 1987.

We believe Mr. Stern's extensive experience in corporate finance, his expertise in the life sciences industries and his previous experience as a member of our Board qualify him to be a member of our Board of Directors.

#### ***No Family Relationships***

There are no family relationships between any of our officers and directors.

## **CORPORATE GOVERNANCE**

### ***Overview***

We are committed to maintaining high 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 the charters of our Board committees, form the basis for our corporate governance framework. As discussed below, our Board has established three standing committees to assist it in fulfilling its responsibilities to the Company and its stockholders: the Audit Committee, the Compensation Committee, and the Nominating and Corporate Governance Committee of the Board (the “Nominating and Corporate Governance Committee”). The references to our website address below do not constitute incorporation by reference of the information contained at or available on our website.

### ***Corporate Governance Guidelines***

Our corporate governance guidelines (the “Corporate Governance Guidelines”) are designed to facilitate the 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 evaluations of the Board and its committees. Our Corporate Governance Guidelines are reviewed periodically by the Nominating and Corporate Governance Committee and amended by our Board when appropriate. The full text of our Corporate Governance Guidelines is available on our website at [www.organovo.com](http://www.organovo.com).

### ***Code of Business Conduct***

We have adopted the Organovo Holdings, Inc. Code of Business Conduct (the “Code of Business Conduct”) that applies to all of our officers, directors, employees and consultants. Among other matters, our Code of Business Conduct is designed to deter unlawful or unethical behavior and to promote the following:

- Prohibiting conflicts of interest (including protecting corporate opportunities);
- Protecting our confidential and proprietary information and that of our customers and vendors;
- Treating our employees, customers, suppliers and competitors fairly;
- Encouraging full, fair, accurate, timely and understandable disclosure;
- Protecting and properly using company assets;
- Complying with laws, rules and regulations (including insider trading laws); and
- Encouraging the reporting of any unlawful or unethical behavior.

Any waiver of the Code of Business Conduct for our executive officers, directors or employees may be made only by our Nominating and Corporate Governance Committee and will be promptly disclosed on our website. We have posted a copy of our Code of Business Conduct, and intend to post amendments to this code, on our website as permitted under SEC rules and regulations. The full text of our Code of Business Conduct is available on our website at [www.organovo.com](http://www.organovo.com).

### ***Board Independence***

Our shares of common stock are listed for trading on the Nasdaq Capital Market. As a result, our Board utilizes the definition of “independence” as that term is defined by the listing standards of the Nasdaq Stock Market and the rules and regulations of the SEC, including the additional independence requirements for members of our Audit

Committee and the Compensation Committee. Our Board considers a director “independent” when the director is not an officer or employee of the Company or its subsidiaries, does not have any relationship which would, or could reasonably appear to, materially interfere with the independent judgment of such director, and the director otherwise meets the independence requirements under the listing standards of the Nasdaq Capital Market and the rules and regulations of the SEC. Our Board has reviewed the materiality of any relationship that each of our directors has with the Company, either directly or indirectly. Based on this review, our Board has affirmatively determined that the following four of our five current directors qualify as “independent” directors: Douglas Jay Cohen, David Gobel, Alison Tjosvold Milhous and Adam Stern. Keith Murphy does not qualify as an independent director due to his current service as our Executive Chairman and his service as Chief Executive Officer of Viscient, which has made payments to the Company in sufficient amounts to qualify as related party transactions leading to director non-independence.

### ***Board Leadership Structure***

Our Bylaws provide our Board with flexibility to combine or separate the positions of Chairman of the Board and Chief Executive Officer in accordance with its determination that utilizing one or the other structure would be in the best interests of our Company and its stockholders. At present, we do not have a Chief Executive Officer. Mr. Murphy serves as the Executive Chairman of the Board and Mr. Jonathan Lieber serves as our President and Chief Financial Officer. Our Board has determined that this structure is in the best interests of the Company and its stockholders at this time.

Our Board believes that having Mr. Murphy serve as Executive Chairman is beneficial because he is the director who is most familiar with our business and industry, possesses detailed and in-depth knowledge of the issues, opportunities and challenges facing us and is therefore best positioned to ensure that the Board’s time and attention are focused on the most critical matters. Our independent directors bring experience, oversight and expertise from outside the Company and industry, while Mr. Murphy, as Executive Chairman, brings Company-specific experience and expertise. The Board believes that its current structure also facilitates information flow between management and the Board, which is essential to effective governance. We have no lead independent director.

### ***Board Committees***

	<b>Audit Committee</b>	<b>Compensation Committee</b>	<b>Nominating and Corporate Governance Committee</b>
<b>Independent Director</b>			
Adam Stern	Member	Member	
Douglas Jay Cohen	Member	Member	Chair
David Gobel		Chair	Member
Alison Tjosvold Milhous	Chair		Member
<b>Non-Independent Director</b>			
Keith Murphy			

**Compensation Committee.** Our Compensation Committee currently consists of Mr. Gobel (Chair), Mr. Cohen and Mr. Stern. The functions of the Compensation Committee include the approval of the compensation offered to our executive officers and recommending to the full Board the compensation to be offered to our non-employee directors. Additionally, in accordance with Nasdaq listing standards, the Compensation Committee evaluates the independence of each compensation consultant, outside counsel and advisor retained by or providing advice to the Compensation Committee. The Board has determined that each member of the Compensation Committee is an “independent director” under Nasdaq listing standards and the applicable rules and regulations of the SEC. In addition, the existing and planned future members of the Compensation Committee qualify as “non-employee directors” for purposes of Rule 16b-3 under the Exchange Act. The Compensation Committee may delegate authority to one or more members of the Compensation Committee or to one or more of our executives of the Company, and may form and delegate authority to one or more subcommittees and to one or more committees of executives of the Company, except that the Compensation Committee may not delegate authority to approve compensation for our Chief Executive Officer or our other Section 16 and other executive officers to any person or committee (other than to a subcommittee consisting exclusively of at least three members of the Compensation Committee). Our Compensation Committee has the authority to engage the services of compensation consultants,



outside counsel, experts and other advisors as it determines appropriate ways to assist it in the performance of its functions. The Compensation Committee engaged the services of Anderson, a compensation consulting firm, beginning on October 1, 2020 as its independent compensation consultants, to assist it in evaluating our overall executive compensation program and practices. The Compensation Committee is governed by a written charter approved by the Board of Directors, a copy of which is available on our website at [www.organovo.com](http://www.organovo.com).

***Audit Committee.*** Our Audit Committee currently consists of Ms. Milhous (Chair), Mr. Cohen and Mr. Stern. The functions of the Audit Committee include the retention of our independent registered public accounting firm, reviewing and approving the planned scope, proposed fee arrangements and results of the Company's annual audit, reviewing the adequacy of the Company's accounting and financial controls and reviewing the independence of the Company's independent registered public accounting firm. The Board has determined that each member of the Audit Committee is an "independent director" under the Nasdaq listing standards, is financially literate under Nasdaq listing standards, and at least one member has financial sophistication under Nasdaq listing standards. The Board has also determined that Ms. Milhous is an "audit committee financial expert" within the applicable definition of the SEC. The Audit Committee is governed by a written charter approved by the Board of Directors, a copy of which is available on our website at [www.organovo.com](http://www.organovo.com).

***Nominating and Corporate Governance Committee.*** Our Nominating and Corporate Governance Committee currently consists of Mr. Cohen (Chair), Mr. Gobel and Ms. Milhous. The functions of the Nominating and Corporate Governance Committee include the identification, recruitment and nomination of candidates for the Board and its committees, making recommendations to the Board concerning the structure, composition and functioning of the Board and its committees (including the reporting channels through which the Board receives information and the quality and timeliness of the information), developing and recommending to the Board corporate governance guidelines applicable to the Company and annually reviewing and recommending changes (as necessary or appropriate), overseeing the annual evaluation of the Board's effectiveness and performance, and periodically conducting an individual evaluation of each director. The Board has determined that each member of the Nominating and Corporate Governance Committee is an "independent director" under the Nasdaq listing standards and the applicable rules and regulations of the SEC. The Nominating and Corporate Governance Committee is governed by a written charter approved by the Board of Directors, a copy of which is available on our website at [www.organovo.com](http://www.organovo.com).

### ***Board and Committee Attendance***

During the fiscal year ended March 31, 2021, all directors attended 75% or more of the aggregate of the meetings of the Board and of each of the Board committees on which they served. The Board met 19 times and acted by written consent eight times during the fiscal year ended March 31, 2021; the Audit Committee met four times and acted by written consent four times during the fiscal year ended March 31, 2021; the Compensation Committee met three times and acted by written consent eight times during the fiscal year ended March 31, 2021; and the Nominating and Corporate Governance Committee did not meet and acted by written consent one time during the fiscal year ended March 31, 2021.

### ***Director Attendance at the Annual Meeting***

We believe the Annual Meeting provides a good opportunity for our directors to hear any feedback that our stockholders may desire to share with the Company and the Board. As a result, we encourage our directors to attend our Annual Meetings. We reimburse our directors for the reasonable expenses they may incur in attending the Annual Meeting. At the 2020 Annual Meeting of Stockholders, four of our then serving directors were in attendance.

### ***Executive Sessions***

Executive sessions of our independent directors are held at each regularly scheduled meeting of our Board and at other times they deem necessary. The Board's policy is to hold executive sessions without the presence of management, with our Executive Chairman in attendance. Our Board committees also generally meet in executive session at the end of each committee meeting.

### ***Board Oversight of Risk***

Our Board is actively involved in the oversight of risks that could affect our Company. The Board as a whole has responsibility for risk oversight of the Company's risk management policies and procedures, with specific reviews of certain areas being conducted by the relevant Board committee. The Board satisfies this responsibility through reports by each committee chair to the Board regarding the committee's considerations and actions, as well as through regular reports directly from the member or members of management responsible for oversight of particular risks within the Company. Specifically, the Board committees address the following risk areas:

- The Compensation Committee is responsible for overseeing the management of risks related to the Company's executive compensation plans and arrangements.
- The Audit Committee discusses with management the Company's major financial risk exposures, regulatory and compliance matters and the steps management has taken to monitor and control such exposures.
- The Nominating and Corporate Governance Committee is responsible for overseeing the Company's compliance with good corporate governance practices, including the requirements established by the SEC and the Nasdaq Capital Market.

The Board encourages management to promote a corporate culture that incorporates risk management into the Company's day-to-day business operations.

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

No member of our Compensation Committee has at any time been our employee. None of our executive officers serves, or has served during the last fiscal year, as a member of the board of directors or compensation committee of any other entity that has one or more executive officers serving as a member of our Board or our Compensation Committee.

### ***Stock Ownership Guidelines***

All of our executive officers and non-employee directors are subject to stock ownership guidelines approved by the Board within five years of most recently starting employment or becoming a director. Our Chief Executive Officer is required to beneficially hold a number of shares of the Company's common stock with a value equal to five times his base salary. All other executive officers that are full-time employees of the Company are required to hold a number of shares with a value equal to three times their base salary. Non-employee directors are required to beneficially hold a number of shares of the Company's common stock with a value equal to four times the annual cash retainer paid to them for service as a member of our Board. For purposes of the guidelines, the shares deemed held include, among others, shares held directly or in joint accounts with certain family members, vested stock options (based on a value determined under the guidelines) and unvested restricted stock units or restricted stock awards subject to time-based vesting. All of our current officers or directors commenced their most recent services with us within the last two years and therefore none of our current officers or directors is currently subject to the stock ownership requirements under the guidelines.

### ***Succession Planning***

The Corporate Governance Guidelines provide for an annual succession planning process for the Company's Chief Executive Officer and its other executives and key employees.

### ***Consideration of Director Nominees***

**General.** In evaluating nominees for membership on our Board, our Nominating and Corporate Governance Committee applies the Board membership criteria set forth in our Corporate Governance Guidelines. Under these criteria, the Nominating and Corporate Governance Committee takes into account many factors, including an

individual's business experience and skills (including skills in core areas such as operations, management, technology, relevant industry knowledge (e.g., research tools, contract research services, therapeutics, drug discovery, reimbursement, medical/surgical), accounting and finance, regulatory matters and clinical trials, leadership, strategic planning and international markets), as well as independence, judgment, professional reputation, integrity and ability to represent the best interests of the Company and its stockholders. In addition, the Nominating and Corporate Governance Committee will also consider the ability of the nominee 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 nominees. The Board does not have a formal policy with respect to diversity of nominees. Rather, our Nominating and Corporate Governance Committee considers Board membership criteria as a whole and seeks to achieve diversity of occupational and personal backgrounds on the Board. Our Board will be responsible for selecting candidates for election as directors based on the recommendation of the Nominating and Corporate Governance Committee.

Our Nominating and Corporate Governance Committee regularly assesses the appropriate size of our Board, and whether any vacancies on our Board are expected due to retirement or other reasons. In the event that vacancies are anticipated, or otherwise arise, the Committee will consider various potential nominees who may come to the attention of the Committee through current Board members, professional search firms, stockholders or other persons. Each potential nominee brought to the attention of the Committee, regardless of who recommended such potential nominee, is considered on the basis of the criteria set forth in our Corporate Governance Guidelines.

***Stockholder Nominees.*** The Nominating and Corporate Governance Committee will review a reasonable number of candidates for director recommended by a single stockholder who has held more than 1.0% of our common stock for more than one year and who satisfies the notice, information and consent provisions set forth in our Bylaws. The Board will use the same evaluation criteria and process for director nominees recommended by stockholders as it uses for other director nominees. A stockholder wishing to formally nominate an individual for election to the Board must do so by following the procedures described in the Bylaws. There has been no change to the procedures set forth in our Bylaws by which stockholders may recommend nominees to our Board. For information concerning stockholder proposals, see "Stockholder Proposals for the 2022 Annual Meeting" below in this Proxy Statement.

#### ***Communications with the Board of Directors***

The Board desires that the views of stockholders will be heard by the Board, its committees or individual directors, as applicable, and that appropriate responses will be provided to stockholders on a timely basis. Stockholders wishing to formally communicate with the Board, the independent directors as a group or any individual director may send communications directly to the Company at 440 Stevens Ave, Suite 200, Solana Beach, CA 92075, Attention: Corporate Secretary. All clearly marked written communications, other than unsolicited advertising or promotional materials, are logged and copied, and forwarded to the director(s) to whom the communication was addressed. Please note that the foregoing communication procedure does not apply to (i) stockholder proposals pursuant to Exchange Act Rule 14a-8 and communications made in connection with such proposals or (ii) service of process or any other notice in a legal proceeding.

## DIRECTOR COMPENSATION

Our directors play a critical role in guiding our strategic direction and overseeing the management of our 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. Our employee directors receive no separate compensation for their service as directors. Our Executive Chair is not an employee of ours and therefore is deemed to be a non-employee director for purposes of our non-employee director compensation policy.

Our director compensation is overseen by the Compensation Committee, which makes recommendations to our Board on the appropriate structure for our non-employee director compensation program and the appropriate amount of compensation. Our Board is responsible for final approval of our non-employee director compensation program and the compensation paid to our non-employee directors.

In connection with establishing our non-employee director compensation for Fiscal 2021, the Compensation Committee retained Anderson as its independent compensation consultant. With the assistance of Anderson, the Board and Compensation Committee conducted a formal review of our non-employee director compensation and incentive programs relative to the same peer group used in benchmarking the compensation for our executive officers. The Compensation Committee and the Board determined that a philosophy of targeting total compensation for our non-employee directors at the 50th percentile (based on peer group benchmarks) is in the best interests of the Company and its stockholders.

### ***Non-Employee Director Compensation Framework***

For Fiscal 2021, our non-employee director compensation program consisted of: (i) annual cash retainers for Board service and for service as the chair or member of one of the standing Board committees and (ii) equity awards granted on an annual basis to continuing non-employee directors immediately following the Annual Meeting of Stockholders or upon their initial appointment to the Board for new directors. Our non-employee directors are not entitled to any Board or Board committee meeting fees.

***Annual Cash Retainers.*** From April 1, 2020 to September 15, 2020, each of our non-employee directors was eligible to receive an annual cash retainer of \$50,000 for Board membership. In addition, the chair of our Audit Committee was eligible to receive an annual retainer of \$10,000. Our non-employee directors were otherwise not eligible to receive an annual cash retainer in Fiscal 2021.

Effective as of September 15, 2020, for Fiscal 2021, each of our non-employee directors was eligible to receive an annual cash retainer of \$65,000 for Board membership. In addition, for Fiscal 2021, each of our non-employee directors was eligible to receive the applicable annual retainers set forth below for serving as committee chairs and for service as a member of a Board committee:

Position	Nominating and Corporate Governance Committee		
	Audit Committee	Compensation Committee	
Committee Chair	\$ 25,000	\$ 25,000	\$ 25,000
Committee Member (excluding Chair)	\$ 15,000	\$ 15,000	\$ 15,000

No additional meeting fees were paid to our non-employee directors for Fiscal 2021.

***Annual Equity Awards.*** In addition to the annual cash retainers, each non-employee director continuing in office after the adjournment of the 2020 Annual Meeting of Stockholders received a stock option award (the "Annual Award") immediately following the adjournment of the annual meeting. The number of shares subject to the Annual Award was calculated by taking the number of shares of common stock equal to 0.04% of the outstanding

shares of common stock of the Company as of the date of the Annual Award, with the number of shares subject to the option rounded up to the nearest 500 shares.

The Annual Award has an exercise price equal to the closing market price of the Company's common stock on the date of the Annual Awards. Each such Annual Award will vest in full on the earlier of (i) one year from the date of the Annual Award or (ii) one day prior to the next Annual Meeting of Stockholders held by the Company, subject to acceleration in the event of the change of control.

**Initial Long-Term Equity Awards.** During Fiscal 2021, our non-employee director compensation program provided that upon joining the Board (whether by appointment or election by stockholders), a non-employee director will receive an initial stock option award (the "Initial Award") equal to 0.04% of the outstanding shares of common stock of the Company as of the date of the director's appointment or election to the Board. The new director also receives an Annual Award calculated on the same basis as the Annual Award for an existing director, except that the initial Annual Award shall be pro-rated based on the date of the director's appointment or election and the number of months remaining in the twelve-month period between the last regularly scheduled Annual Meeting held by the Company and the next regularly scheduled Annual Meeting to be held by the Company. The Initial Award and initial Annual Award will have an exercise price equal to the closing market price of the Company's common stock on the date the awards are granted. Each such Initial Award will vest quarterly over a period of twelve quarters from the vesting commencement date, subject to acceleration in the event of the change of control. Each initial Annual Award shall vest in full on the earlier of (i) one year from the date of the Annual Award or (ii) one day prior to the next Annual Meeting of Stockholders held by the Company, subject to acceleration in the event of the change of control.

**Reimbursement.** Our non-employee Directors are entitled to reimbursement for their reasonable travel and lodging expenses for attending Board and Board committee meetings.

#### **Director Compensation Table**

The following table sets forth the compensation earned and paid to each member of our Board for service as a director during Fiscal 2021:

<b>Name (1)</b>	<b>Fees Earned or Paid in Cash (\$)</b>	<b>Stock Awards (\$)</b>	<b>Option Awards (\$)(2)</b>	<b>All Other Compensation (\$)(3)</b>	<b>Total (\$)</b>
Douglas Jay Cohen (4)	\$ 64,891	\$ —	\$ 218,497	\$ 7,650	\$ 295,930
David Gobel (4)	56,780	—	218,497	—	279,557
Alison Tjosvold Milhous (4)	56,780	—	218,497	—	279,557
Adam Stern (5)	60,217	—	218,497	—	278,714
Keith Murphy (6)	43,098	—	218,497	—	261,595
Mark Kessel (7)	32,473	—	—	—	32,473
Kirk Malloy, Ph.D. (7)	35,786	—	—	—	35,786
Richard Maroun (8)	23,188	—	—	—	23,188
David Shapiro, M.D. (8)	15,360	—	—	—	15,360
Carolyn Beaver (7)	27,473	—	—	—	32,473

(1) Taylor Crouch, our former President and Chief Executive Officer, and two of our named executive officers are not included in this table as they were employees of the Company and therefore received no compensation for their service as a director. Mr. Crouch's compensation is included in the section entitled "Summary Compensation Table" on page 45 of this Proxy Statement.

(2) These amounts represent the grant date fair value of stock option awards granted by the Board, determined in accordance with FASB ASC Topic 718. All awards are amortized over the vesting life of the award. For the assumptions used in our valuations, see "Note 5 – Stockholders' Equity" of our notes to consolidated financial statements in the Annual Report on Form 10-K for the year ended March 31, 2021, as filed with the SEC.

(3) Excludes amounts reimbursed for reasonable travel to Board and Board committee meetings. For Mr. Cohen, the amount consists of the reimbursement of Mr. Cohen's expenses for attending corporate governance training.

(4) Mr. Cohen, Mr. Gobel and Ms. Milhous were appointed to our Board on September 15, 2020.

(5) Mr. Stern was appointed to our Board on July 14, 2020.

- (6) Comprised solely of the fees received by Mr. Murphy pursuant to his service as a member of the Board of Directors. Mr. Murphy's additional compensation for Fiscal 2021 is included in the section entitled "Summary Compensation Table" on page 45 of this Proxy Statement.
- (7) Mr. Kessel, Dr. Malloy and Ms. Beaver each resigned from the Board on September 15, 2020.
- (8) Pursuant to that certain Cooperation Agreement, by and between us and Keith Murphy, dated as of July 14, 2020 (the "Cooperation Agreement"), Mr. Maroun and Dr. Shapiro resigned from the Board on July 14, 2020.

## EXECUTIVE OFFICERS

The following persons are our executive officers as of the date of this Proxy Statement and hold the positions set forth opposite their names as of July 29, 2021:

Name	Age	Position
Keith Murphy	49	Executive Chairman
Jonathan Lieber	52	President and Chief Financial Officer
Jeffrey Miner	59	Chief Scientific Officer
Thomas Jurgensen	64	General Counsel and Corporate Secretary

See the section entitled “Board of Directors Information”, above, for a description of the business experience and educational background of Mr. Murphy.

**Jonathan Lieber, President and Chief Financial Officer**, joined us in May 2021. Mr. Lieber is currently employed by Danforth Advisors, LLC (“Danforth”), a professional financial consulting services firm. Mr. Lieber is a seasoned executive with significant experience in managing and leading teams as well as overseeing the financial and operational responsibilities of private and publicly traded life sciences companies. He has more than twenty-five years of experience and has been a Managing Director at Danforth since December 2018. In that capacity, he is currently serving as interim CFO for a number of healthcare companies, including ENYO Pharma SA, Prime Medicine, Inc., Turnstone Biologics Corp., Cognito Therapeutics, Inc. and Volastra Therapeutics, Inc. His experience includes senior management roles, including previously serving as Chief Financial Officer and Treasurer of Histogenics Corporation from July 2015 to September 2019. Mr. Lieber also previously served as Senior Vice President, Chief Financial Officer and Treasurer of Metamark Genetics from January 2014 to June 2015. Earlier in his career, he held the position of Chief Financial Officer and Treasurer at Repligen Corporation, and Chief Financial Officer and Treasurer at Xcellerex, Inc. Mr. Lieber began his life sciences career at Altus Pharmaceuticals from July 2002 through March 2009. He has also served as a Board Member of Salaris Pharmaceuticals, Inc. (Nasdaq: SLRX) since June 2020. He received an MBA in finance from the Stern School of Business of New York University and a BA in Business Administration/Finance from Boston University.

**Jeffrey Miner, Chief Scientific Officer**, joined us in September 2020. Dr. Miner has held management and executive leadership positions in pharmaceutical and life sciences companies for more than 20 years. He has extensive biotech and pharmaceutical experience spanning discovery, preclinical, translational and clinical development. He currently serves as co-founder and Chief Scientific Officer for Viscient, a position he has held since June 2017. Prior to co-founding Viscient, Dr. Miner was Executive Director of Biology at AstraZeneca from January 2013 to January 2017, and Senior Director of Ardea Biosciences, a member of the AstraZeneca group, from January 2008 to January 2013. From 1993 to December 2007, he held positions of increasing responsibility, including Head of Molecular and Cellular Biology, at Ligand Pharmaceuticals. Dr. Miner has also been a Faculty Advisor and Molecular Biology Institute Associate at San Diego State University since 2005 and has served as a Board Member of the Scientific Advisory Board for ARTA Bioscience since 2008. Dr. Miner completed a post-doctoral fellowship at the University of California San Francisco in 1993 on glucocorticoid receptor gene regulation in Keith Yamamoto’s laboratory. He received his Ph.D. in Microbiology in 1989 from Oregon State University conducting graduate research in Virology in Dennis Hruby’s laboratory and he received his B.S. degree in Biology from The College of Idaho in 1984. Dr. Miner has drug discovery experience in the Inflammation, Oncology, Endocrine, Hepatology and Cardiovascular therapeutic areas and his work has led to, or enhanced, the development of multiple marketed medicines. His target areas of expertise include Nuclear Receptors, Kinases and Transporters. He has published more than 70 peer-reviewed articles and book chapters and is an inventor on multiple patents.

**Thomas Jurgensen, General Counsel and Corporate Secretary**, joined us in September 2020. Mr. Jurgensen has more than 30 years of corporate, transactional and intellectual property legal experience and is licensed to practice in California, Colorado, Minnesota and before the United States Patent and Trademark Office. Prior to joining Organovo, Mr. Jurgensen was in private practice with Optima Law Group, APC in San Diego, California, serving as its Managing Shareholder since he founded the firm in February 2011 until May 2021. Optima Law Group serves a diverse base of life science and technology clients with a focus on early stage and emerging companies and also has offices in Boulder, Colorado. He previously served as Managing Shareholder and President of Catalyst Law Group in San Diego, California, from December 2003 to December 2010. From January 2001 to December 2003, he

practiced corporate and intellectual property law with the firm of Blanchard, Krasner and French in La Jolla, California, while also serving as the Acting General Counsel of Ligand Pharmaceuticals, Inc. Prior to that, Mr. Jurgensen served as Vice President and General Counsel for The Salk Institute for Biological Studies in La Jolla, California, from January 1999 to December 2000; Vice President, General Counsel and Corporate Secretary for Molecular Biosystems, Inc. in San Diego, California, from February 1997 to November 1998; and Assistant General Counsel at Ligand Pharmaceuticals, Inc. in San Diego, California, from March 1993 to February 1997. Mr. Jurgensen also was an Intellectual Property Attorney at Minnesota Mining and Manufacturing (3M) in St. Paul, Minnesota, and an Associate Attorney with the law firm of Merchant and Gould, PA in Minneapolis, Minnesota. Mr. Jurgensen has been a founder of numerous technology companies including Allylix, Inc. He has served in a number of executive roles at both private and public companies, including as CEO, President, Vice President, General Counsel and Secretary, and has served and still serves on selected private company boards of directors. A petition of bankruptcy was filed by Mr. Jurgensen and Catalyst Law Group in December 2011. Mr. Jurgensen received a Bachelor of Science degree in Biology with a Chemistry minor from the University of Wisconsin River Falls in May 1981. He then received his Master of Science degree in Animal Ecology from Iowa State University in Ames, Iowa, in December 1985 and conducted research in southern Chile under grants from the National Science Foundation and the Organization of American States. He received his law degree from the University of Oregon School of Law in May 1989 and was awarded Order of the Coif and served as Managing Editor on the Journal of Environmental Law and Litigation.



## 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 July 19, 2021 (the record date) by (i) each person who, to our knowledge (based solely on our review of Schedules 13D and 13G filed with the SEC or ETF website, as applicable), beneficially owns more than 5% of our common stock; (ii) each of our directors, director nominees and named executive officers (as disclosed in this Proxy Statement); and (iii) all of our executive officers, directors and director nominees 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 such person's address is c/o Organovo Holdings, Inc., 440 Stevens Ave, Suite 200, Solana Beach, CA 92075.

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 on or before July 19, 2021. In cases of holders who are not directors, director nominees and named executive officers, Schedules 13G or 13D filed with the SEC or ETF website, as applicable (and, consequently, ownership reflected here), often reflect holdings as of a date prior to July 19, 2021. 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 60 days of July 19, 2021. These shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other person or entity.

Applicable percentages are based on 8,705,358 shares of common stock outstanding as of July 19, 2021, as adjusted as required by the rules promulgated by the SEC. We have deemed shares of our common stock subject to stock options that are currently exercisable or exercisable within 60 days of July 19, 2021, or issuable pursuant to restricted stock units that are subject to vesting conditions expected to occur within 60 days of July 19, 2021, to be outstanding and to be beneficially owned by the person holding the stock option or restricted stock units for the purpose of computing the percentage ownership of that person. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person or entity.

Name of Beneficial Owner	Beneficial Ownership(1)	
	Number of Common Shares	Percent of Common Shares
<b>5% Stockholders</b>		
ARK Investment Management, LLC	674,454 (2)	7.7%
Sumitomo Mitsui Trust Holdings, Inc.	478,570 (3)	5.5%
<b>Directors and Named Executive Officers</b>		
Taylor Crouch (4)	233,849 (5)	2.7%
Craig Kussman (6)	94,443 (7)	1.1%
Keith Murphy	94,237 (8)	1.1%
Jennifer Kinsbruner Bush, JD (9)	86,829 (10)	1.0%
Thomas Jurgensen	5,000 (11)	*
Jeffrey Miner	25,000 (11)	*
Douglas Jay Cohen	12,917 (12)	*
David Gobel	11,942 (13)	*
Alison Tjosvold Milhous	11,667 (14)	*
Adam Stern	11,667 (14)	*
All current executive officers and directors as a group (8 persons)	172,430 (15)	2.0%

\* Less than one percent.

- (1) Beneficial ownership of shares and percentage ownership are determined in accordance with the rules of the SEC. Unless otherwise indicated and subject to community property laws where applicable, the individuals named in the table above have sole voting and investment power with respect to all shares of our common stock shown as beneficially owned by them.
- (2) ARK Investment Management LLC ("ARK") filed a Schedule 13G/A on March 10, 2021, reporting that it had sole voting power with respect to 670,926 shares, shared voting power with respect to 3,528 shares, sole dispositive power with respect to 674,454 shares and beneficial ownership of an aggregate of 674,454 shares in its capacity as an investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E) under the Exchange Act. ARK's address is 3 East 28th Street, 7th Floor, New York, NY 10016.
- (3) Sumitomo Mitsui Trust Holdings, Inc. ("Sumitomo") filed a Schedule 13G/A with the SEC on February 5, 2021, reporting that it had shared voting power with respect to 478,570 shares, shared dispositive power with respect to 478,570 shares and beneficial ownership of an aggregate of 478,570 shares in its capacity as a parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G) under

the Exchange Act and as a non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J) under the Exchange Act. Sumitomo's Schedule 13G/A also reported that Nikko Asset Management Co., Ltd. ("NAM") had shared voting power with respect to 478,570 shares, shared dispositive power with respect to 478,570 shares and beneficial ownership of an aggregate of 478,570 shares in its capacity as an investment advisor in accordance with Rule 13d-1(b)(1)(ii)(E) under the Exchange Act, as a parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G) under the Exchange Act and as a non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J) under the Exchange Act. The securities being reported in the Schedule 13G/A filed by each of Sumitomo and NAM, as parent holding companies, are owned, or may be deemed to be beneficially owned, by their subsidiary Nikko Asset Management Americas, Inc. ("Nikko"), which is classified as an investment advisor in accordance with Rule 13d-1(b)(1)(ii)(E) under the Exchange Act. Sumitomo's address is 1-4-1 Marunouchi, Chiyoda-ku, Tokyo 100-8233, Japan. NAM's address is Midtown Tower, 9-7-1 Akasaka, Minato-ku, Tokyo 107-6242, Japan. Nikko filed a Schedule 13G/A with the SEC on February 11, 2021, reporting that it had shared voting power with respect to 371,410 shares, shared dispositive power with respect to 478,570 shares and beneficial ownership of an aggregate of 478,570 shares in its capacity as an investment advisor in accordance with Rule 13d-1(b)(1)(ii)(E) under the Exchange Act. Nikko's address is 605 Third Avenue, 38th Floor, New York, NY 10158.

- (4) Mr. Crouch resigned effective September 15, 2020.
- (5) Represents 31,940 shares of common stock held by Mr. Crouch and 201,909 shares subject to options that are immediately exercisable or exercisable within 60 days of July 19, 2021 as a result of a change in control in September 2020.
- (6) Mr. Kussman resigned effective September 15, 2020.
- (7) Represents 29,196 shares of common stock held by Mr. Kussman and 65,247 shares subject to options that are immediately exercisable or exercisable within 60 days of July 19, 2021 as a result of a change in control in September 2020.
- (8) Represents 66,320 shares of common stock held by Mr. Murphy and 27,917 shares subject to options that are immediately exercisable or exercisable within 60 days of July 19, 2021.
- (9) Ms. Bush resigned effective September 15, 2020.
- (10) Represents 20,167 shares of common stock held by Ms. Bush and 66,662 shares subject to options that are immediately exercisable or exercisable within 60 days of July 19, 2021 as a result of a change in control in September 2020.
- (11) Represents shares subject to options that are immediately exercisable or exercisable within 60 days of July 19, 2021.
- (12) Represents 1,250 shares of common stock held by Mr. Cohen and 11,667 shares subject to options that are immediately exercisable or exercisable within 60 days of July 19, 2021.
- (13) Represents 130 shares of common stock held by Mr. Gobel, 145 shares held jointly by Mr. Gobel and his spouse and 11,667 shares subject to options that are immediately exercisable or exercisable within 60 days of July 19, 2021.
- (14) Represents 11,667 shares subject to options that are immediately exercisable or exercisable within 60 days of July 19, 2021.
- (15) Comprised of shares included under "Directors and Named Executive Officers", excluding Mr. Crouch, Ms. Bush and Mr. Kussman.

### ***Change in Control***

On September 15, 2020, the Company's stockholders approved an advisory vote to appoint three individuals, Douglas Jay Cohen, David Gobel and Alison Tjosvold Milhous, to the Board (the "Advisory Nominee Proposal"). In connection with the Advisory Nominee Proposal, and pursuant to the Cooperation Agreement, Mr. Crouch, Mr. Kussman and Ms. Bush each resigned from the Company effective September 15, 2020. The appointment of Douglas Jay Cohen, David Gobel and Alison Tjosvold Milhous to the Board constituted a "change in control" under the Company's Severance and Change in Control Plan, as amended, which was in effect before the Company received the Advisory Nominee Proposal and before the Company entered into the Cooperation Agreement. The beneficial ownership of our common stock as of July 19, 2021 of Douglas Jay Cohen, David Gobel and Alison Tjosvold Milhous is set forth in the immediately preceding table.

## EXECUTIVE COMPENSATION

The following discussion is designed to provide our stockholders with an understanding of our compensation philosophy and objectives as well as an overview of the analysis that our Compensation Committee performed in setting the compensation of our executive officers for Fiscal 2021 (i.e., the period from April 1, 2020 to March 31, 2021).

This discussion summarizes the Compensation Committee's determination of how and why, in addition to what, compensation actions were taken for our Principal Executive Officers, our two other most highly compensated executive officers serving as of the end of Fiscal 2021, as well as our two other most highly compensated former executive officers serving during Fiscal 2021, as follows:

- Keith Murphy, our Executive Chairman and Principal Executive Officer;
- Thomas Jurgensen, our General Counsel and Corporate Secretary;
- Jeffrey Miner, our Chief Scientific Officer;
- Taylor Crouch, our former Chief Executive Officer and President;
- Craig Kussman, our former Chief Financial Officer; and
- Jennifer Kinsbruner Bush, JD, our former Senior Vice President, General Counsel, Corporate Secretary and Compliance Officer.

Mr. Crouch, Mr. Kussman and Ms. Bush each resigned effective September 15, 2020. These six individuals are collectively referred to in this Proxy Statement as our "named executive officers".

### ***Recent "Say-on-Pay" Vote***

At our 2020 Annual Meeting of Stockholders, we held a stockholder advisory vote, commonly referred to as a "say-on-pay" vote, to approve the compensation of our named executive officers for Fiscal 2020 (i.e., the period from April 1, 2019 to March 31, 2020). We received approval from our stockholders, with approximately 65% of stockholder votes cast in favor of the proposal. For purposes of this vote regarding Fiscal 2020 named executive officer compensation, our group of named executive officers included solely former officers of the Company, none of whom were employed by the Company as of March 31, 2021. The Compensation Committee will consider the outcome of the annual say-on-pay votes when making future compensation decisions.

### ***Compensation Philosophy and Objectives***

Our executive compensation program focuses on creating alignment between our stockholders and executive officers by including both performance- and incentive-based compensation elements. Our compensation package also combines both short- and long-term components (cash and equity, respectively) at the levels the Compensation Committee determined to be appropriate to motivate, reward, and retain our executive officers. Our executive compensation program is designed to achieve the following key objectives:

- Attract, retain, and reward talented executives and motivate them to contribute to the Company's success and to build long-term stockholder value;
- Establish financial incentives for executives to achieve our key financial, operational, and strategic goals;
- Enhance the relationship between executive pay and stockholder value by utilizing long-term equity incentives; and

- Recognize and reward executives for superior performance.

### ***Use of Market Data and Benchmarking***

The Compensation Committee endeavors to set compensation at competitive levels. In order to do this, the Compensation Committee compares our compensation packages with the packages offered by other companies that are similarly situated, and with which we compete for talent.

For Fiscal 2021, the Compensation Committee engaged Anderson, an independent compensation consultant, as the Compensation Committee's advisor reporting directly to the chair of the Compensation Committee. The Compensation Committee determined that no conflict of interest exists that would preclude Anderson from serving as an independent consultant to the Compensation Committee.

The Compensation Committee requested Anderson conduct a review and analysis of our executive compensation programs as compared against competitive benchmarks. This included a benchmarking analysis against prevailing market practices of a peer group of comparable companies approved by the Compensation Committee and broader industry trends and benchmarks. The analysis included a review of the "Total Direct Compensation" (which includes salary, cash incentives, and equity awards) of our executive officers, and was based on an assessment of market trends covering available public information as well as proprietary information provided by Anderson.

For Fiscal 2021, based on recommendations from Anderson, our Compensation Committee determined that our peer group should be modified to better reflect our current market valuation as well as the growing importance of our therapeutics program to our overall business model. With input from Anderson, our Compensation Committee added a group of companies focused on human therapies, with comparable size, revenues, market valuations, and stage of leading therapeutic candidate. Our Compensation Committee also replaced some of the companies previously included in our peer group because their market valuations had grown too low for direct comparison to our Company, and/or their business focus had become less relevant for direct comparison to our Company. Our Compensation Committee then used the compensation data from this revised peer group in setting executive compensation for Fiscal 2021.

The peer group for Fiscal 2021 included:

Advaxis	CTI Biopharma Corp	Regulus Therapeutics
Aerpio Pharmaceuticals	CytRx	Scynexis
Aprea Therapeutics	Evoke Pharma	Seelos Therapeutics Inc.
aTyr Pharma	Heat Biologics	Sesen Bio, Inc.
Bellicum Pharmaceuticals	Idera Pharmaceuticals	Soligenix, Inc.
Brickell Biotech Inc.	Ocuphire Pharma	Synthetic Biologics
Capricor Therapeutics	Onconova Therapeutics	Voyager Therapeutics
Celsion Corp	OncoSec Medical	
Cidara Therapeutics	Pulmatrix	

### ***Determination of Executive Compensation***

In addition to peer group data, the Compensation Committee considered relevant publicly available market data and surveys and the compensation reports it received from Anderson. The Compensation Committee also reviewed and considered the compensation recommendations of our Chief Executive Officer (other than with respect to determining his own compensation), the Company's overall performance during Fiscal 2021, the Company's financial status and operating runway, each executive officer's responsibilities and contribution to the Company's achievement of the Fiscal 2021 corporate goals, and each executive officer's individual performance during Fiscal 2021. With respect to new hires, our Compensation Committee considered the executive officer's background and historical compensation in lieu of prior year performance in addition to benchmark data for the newly hired executive's position.

## ***Commitment to Good Compensation Governance Practices***

In designing our executive compensation program, our Compensation Committee intends to create alignment between our stockholders and executive officers and to implement good compensation governance by:

- ***Annual Advisory Vote on the Compensation of our Named Executive Officers*** – We provide our stockholders with the ability to vote annually on the compensation of our named executive officers.
- ***Independent Compensation Consultant*** – The Compensation Committee engaged Anderson during Fiscal 2021 to serve as its independent compensation consultant. Anderson did not provide any other services to the Company during the periods it served as a consultant to the Compensation Committee.
- ***Performance and Incentive Based*** – A significant percentage of the Total Direct Compensation our executive officers can earn is performance and incentive based, thereby aligning the interests of our executive officers with our stockholders' interests.
- ***Stock Ownership Guidelines*** – The Compensation Committee established stock ownership guidelines to further align our executive officers' interests with those of our stockholders. The guidelines require each of our named executive officers to acquire and hold a meaningful ownership interest in our Company.
- ***Compensation Risk Assessment*** – The Compensation Committee oversees and evaluates an annual risk assessment of the Company's compensation program. The Compensation Committee believes that the performance goals established for incentives do not encourage excessive risk-taking or have the potential to encourage behavior that may have a material adverse effect on the Company.
- ***Prohibitions on Hedging, Pledging and Margin Activities*** – Our insider trading policy prohibits hedging transactions by Company employees. Under the policy, all short-term, speculative or hedging transactions in Organovo securities are prohibited by all employees. In addition, the policy specifically prohibits the use of Organovo securities for pledging and margin activities.

The Compensation Committee believes that the program and policies described above demonstrate the Company's commitment to, and consistent execution of, an effective performance-oriented executive compensation program. Please see our "2021 Proxy Statement Summary" for an additional list of our compensation best practices.

## ***Components of Executive Compensation***

The framework established by the Compensation Committee, based on the data provided by Anderson, for our executive compensation program consists of a base salary, performance-based cash incentives and long-term equity-based incentives. The Compensation Committee endeavors to combine these compensation elements to develop a compensation package that provides competitive pay, rewards our executive officers for achieving our commercial, operational and strategic objectives and aligns the interests of our executive officers with those of our stockholders.

***Base Salary.*** The Compensation Committee has provided, and will continue to provide, our executive officers with a base salary to compensate them for services provided during the fiscal year. In addition to benchmark data from our peer group, our Compensation Committee considers the Company's overall performance during the prior fiscal year, cash burn, the Company's financial status and operating profile, each executive officer's responsibilities and contribution to the achievement of the prior year's corporate goals, and each executive officer's individual performance during the prior fiscal year. The evaluations and recommendations proposed by our Executive Chair are also considered (other than with respect to determining his own compensation). With respect to new hires, the Compensation Committee considers an executive's background and historical compensation in lieu of prior year performance as well as benchmark data for the new hire's position. Our Compensation Committee evaluates and sets the base salaries for our executives following annual performance evaluations, as well as upon a promotion or other change in responsibility. Our Compensation Committee expects to continue to utilize these policies going forward.

For Fiscal 2021, the Compensation Committee approved 4% cost of living adjustments for Keith Murphy, our Executive Chairperson. In addition, prior to the 2020 Annual Meeting of Stockholders, the Compensation Committee and Board determined that it was in the best interests of the Company and its stockholders to freeze at Fiscal 2020 levels the salaries of Mr. Crouch, Mr. Kussman and Ms. Bush for any services rendered during Fiscal 2021.

The base salaries of our named executive officers for Fiscal 2021 as compared to Fiscal 2020 are set forth in the following table (which does not reflect actual amounts received in Fiscal 2021 or Fiscal 2020):

<b>Name and Title</b>	<b>Fiscal 2021 Base Salary</b>	<b>Fiscal 2020 Base Salary</b>	<b>Increase</b>
Keith Murphy, <i>Executive Chair</i> <sup>(1)</sup>	\$ 354,080	\$ —	N/A
Thomas Jurgensen, <i>General Counsel and Corporate Secretary</i> <sup>(2)</sup>	360,000	—	N/A
Jeffrey Miner, <i>Chief Scientific Officer</i> <sup>(3)</sup>	225,000	—	N/A
Taylor Crouch, <i>Former Chief Executive Officer and President</i>	515,000	515,000	0.0%
Craig Kussman, <i>Former Chief Financial Officer</i>	396,675	396,675	0.0%
Jennifer Kinsbruner Bush, JD, <i>Former SVP, General Counsel, Corporate Secretary and Compliance Officer</i>	357,410	357,410	0.0%

- (1) Mr. Murphy was appointed our Executive Chairman on September 15, 2020 and did not receive a base salary in Fiscal 2020. The Company retained Mr. Murphy through Multi Dimensional Bio Insight LLC (“MDBI”), a biotechnology consulting firm, pursuant to the terms of a consulting agreement, pursuant to which Company has agreed to pay MDBI \$375 per hour of services provided by Mr. Murphy. The amounts reported under “Fiscal 2021 Base Salary” are comprised of the amounts paid to MDBI for its consulting services. Mr. Murphy did not receive a base salary from the Company in Fiscal 2021 or Fiscal 2020.
- (2) Mr. Jurgensen was appointed our General Counsel and Corporate Secretary on September 15, 2020 and did not receive a base salary in Fiscal 2020. The Company contracted with Optima Law Group of San Diego, CA, to provide ongoing legal services in the areas of intellectual property management and corporate transactional support and strategies. Pursuant to this arrangement, Mr. Jurgensen was appointed to assist with legal support prior to the Company’s annual meeting and to thereafter serve as the General Counsel of the Company on a part-time basis with compensation at the rate of \$495 per hour plus reasonable expenses. Effective January 1, 2021, the Company hired Mr. Jurgensen as a full-time employee with a base salary of \$360,000 per year.
- (3) Dr. Miner was appointed our Chief Scientific Officer on September 15, 2020 and did not receive a base salary in Fiscal 2020.

**Performance-Based Cash Incentive Awards.** Our executive compensation program includes an annual performance-based cash incentive award, which provides our executive officers with an annual cash incentive opportunity as a percentage of their base salaries based upon the achievement of corporate and individual performance goals evaluated and approved by the Compensation Committee. For Fiscal 2021, the Compensation Committee determined that the annual target bonus opportunity expressed as a percentage of base salary for Mr. Jurgensen and Dr. Miner should be 40% and 35% of each of their respective base salaries. In addition, prior to the 2020 Annual Meeting of Stockholders, the Compensation Committee and Board determined that it was in the best interests of the Company and its stockholders to freeze at Fiscal 2020 levels the target bonuses of Mr. Crouch, Mr. Kussman and Ms. Bush for any services rendered during Fiscal 2021. In connection with this, prior to their resignations, for Fiscal 2021, the Compensation Committee determined that the annual target bonus opportunity expressed as a percentage of base salary for Mr. Crouch was 50% of his base salary, and the annual target bonus opportunities for Mr. Kussman and Ms. Bush were 40% of their respective base salaries. Each executive officer is eligible to receive up to 150% of his or her target bonus amount based on the achievement of “stretch” corporate goals. If the minimum base performance level is met for a corporate goal, the Compensation Committee has the discretion to assign zero percentage to that performance goal or a bonus percentage on an interpolated basis between zero and 100%. For performance between the target and stretch levels for a performance goal, the bonus percentage for that performance goal is determined on an interpolated basis. For Fiscal 2021, each executive’s annual performance-based cash incentive award was based 100% on the achievement of the Company’s corporate goals.

Accordingly, the Compensation Committee approved bonus payments for Fiscal 2021 as follows:

<u>Name and Title</u>	<u>Percentage of Goal</u>	<u>Fiscal 2021 Bonus Award</u>
Keith Murphy, <i>Executive Chair</i>	0%	—
Thomas Jurgensen, <i>General Counsel and Corporate Secretary</i>	0%	—
Jeffrey Miner, <i>Chief Scientific Officer</i>	35%	\$ 42,101

The Company paid the following pro-rated target bonuses to Mr. Crouch, Mr. Kussman and Ms. Bush as provided for by our Severance Plan (as defined below) and their Participation Agreements (as defined below):

<u>Name and Title</u>	<u>Percentage of Prorated Goal<sup>(1)</sup></u>	<u>Fiscal 2021 Bonus Award</u>
Taylor Crouch, <i>Former Chief Executive Officer and President</i>	50%	\$ 247,271
Craig Kussman, <i>Former Chief Financial Officer</i>	40%	\$ 152,367
Jennifer Kinsbruner Bush, JD, <i>Former SVP, General Counsel, Corporate Secretary and Compliance Officer</i>	40%	\$ 137,285

(1) Mr. Crouch, Mr. Kussman and Ms. Bush resigned effective September 15, 2020.

**Equity-Based Incentive Awards.** In addition to base salaries and annual performance-based cash incentives, the Compensation Committee generally provides long-term, equity-based incentive awards to our executive officers. For Fiscal 2021, these grants consisted of option awards and restricted stock units. In determining the size and terms of the awards, the Compensation Committee considered benchmark data from our peer group, publicly available market and survey data and the individual performance of the named executive officers. The Compensation Committee granted the following awards for Fiscal 2021:

<u>Name</u>	<u>Stock Option Awards (#)</u>	<u>Stock Awards (#)</u>	<u>Option Awards (\$)<sup>(1)</sup></u>	<u>Stock Awards (\$)<sup>(2)</sup></u>	<u>Total (\$)</u>
Keith Murphy	265,000	20,000	\$ 1,801,165	\$ 205,400	\$ 2,006,565
Thomas Jurgensen	55,000	—	430,821	—	430,821
Jeffrey Miner	125,000	—	833,028	—	833,028
Taylor Crouch	—	—	—	—	—
Craig Kussman	—	—	—	—	—
Jennifer Kinsbruner Bush, JD	—	—	—	—	—

- (1) These amounts represent the grant date fair value of time-based stock option awards granted by the Company during the periods presented, determined in accordance with FASB ASC Topic 718. All awards are amortized over the vesting life of the award. For the assumptions used in our valuations, see “Note 5 – Stockholders’ Equity” of the Notes to Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended March 31, 2021, as filed with the SEC.
- (2) These amounts represent the grant date fair value of time-based and performance-based restricted stock unit awards granted by the Company during the periods presented, determined in accordance with FASB ASC Topic 718. All awards are amortized over the vesting life of the award. For the assumptions used in our valuations, see “Note 5 – Stockholders’ Equity” of the Notes to Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended March 31, 2021, as filed with the SEC.

Prior to the 2020 Annual Meeting of Stockholders, the Compensation Committee and Board determined that it was in the best interests of the Company and its stockholders to not grant Mr. Crouch, Mr. Kussman or Ms. Bush any equity awards for their services during Fiscal 2021.

Additional information regarding the potential accelerated vesting applied to the equity awards held by each executive officer in the event his or her services to the Company are terminated in the event of a change in control of

the Company (i.e., “double trigger” accelerated vesting) is discussed below under “Potential Payments upon Termination or Change in Control.”

### ***Other Benefits***

In order to attract and retain qualified individuals and pay market levels of compensation, we have historically provided, and will continue to provide, our executives with the following benefits:

- ***Health Insurance*** – We provide each of our executives and their spouses and children the same health, dental, and vision insurance coverage we make available to our other eligible employees.
- ***Life and Disability Insurance*** – We provide each of our executives with the same life and disability insurance as we make available to our other eligible employees.
- ***Pension Benefits*** – We do not provide pension arrangements or post-retirement health coverage for our executives or employees. We implemented a 401(k) Plan effective January 1, 2014. We provide a company matching contribution up to 3.5% of compensation for all participants in the 401(k) plan, including our executive officers, to help attract and retain top talent.
- ***Nonqualified Deferred Compensation*** – We do not provide any nonqualified defined contribution or other deferred compensation plans to any of our employees.
- ***Perquisites*** – We limit the perquisites that we make available to our executive officers. In certain cases, we have reimbursed our executive officers for their relocation expenses on their initial hire.

### ***Prior Severance Plan***

In November 2015, we entered into a Severance and Change in Control Plan Participation Agreement (the “Participation Agreement”) with each of our executive officers and certain key employees pursuant to our Severance and Change in Control Plan (the “Severance Plan”) approved by our Compensation Committee. The Severance Plan established the amount of severance payments and benefits available in the event of a (i) termination of employment by the Company for reasons other than Cause (as defined below), death or Disability (as defined below) or by the participant for Good Reason (as defined below) and (ii) termination of employment by the Company for reasons other than Cause, death or Disability or by the participant for Good Reason within six months before or within 12 months after a Change in Control (as defined in the Severance Plan). In May 2020, we amended the Severance Plan to clarify the definitions of Change in Control and Good Reason, and to establish that our General Counsel is included as a Tier 1 Employee under the Severance Plan. The Severance and Change in Control Plan was terminated on November 10, 2020.

The Severance Plan established four tiers of employees: Tier 1, Tier 2, Tier 3 and Tier 4. In Fiscal 2021, the Company’s Tier 1 employees previously included Taylor Crouch, our former Chief Executive Officer, Craig Kussman, our former Chief Financial Officer, and Jennifer Bush, our former SVP, General Counsel, Corporate Secretary and Compliance Officer. The Company’s Tier 2 employees included all non-Tier 1 members of the Company’s executive team. The Company’s Tier 3 employees included all Senior Vice Presidents who were not members of the Company’s executive team. The Company’s Tier 4 employees included all Vice Presidents who were not members of the Company’s executive team and such other executives as the Compensation Committee could specify from time to time.

Upon termination of employment by the Company for reasons other than Cause, death or Disability or by the participant for Good Reason that occurred more than 6 months before a Change in Control (as defined in the Severance Plan), each (i) Tier 1 employee was eligible for a cash severance payment equal to 2.0 times the employee’s base salary, paid in a lump sum, plus a pro-rated target bonus for the fiscal year in which the termination occurred, Health Benefit Continuation (as defined in the Severance Plan) for up to 18 months, and Outplacement Assistance (as defined in the Severance Plan) for 18 months; and (ii) Tier 2 employee was eligible for a cash severance payment equal to 1.0 times the employee’s base salary, paid in a lump sum, plus a pro-rated target bonus



for the fiscal year in which the termination occurred, Health Benefit Continuation for up to 12 months, and Outplacement Assistance for 12 months. The Severance Plan did not provide for accelerated vesting of the equity awards held by the Tier 1 or Tier 2 employees in the event of a termination without Cause or a resignation for Good Reason.

Upon termination of employment by the Company for reasons other than Cause, death or Disability or by the participant for Good Reason within 6 months before or within 12 months after a Change in Control, each (i) Tier 1 employee was eligible for a cash severance payment equal to 2.0 times the employee's base salary, paid in a lump sum, plus a pro-rated target bonus for the fiscal year in which the termination occurred, Health Benefit Continuation (as defined in the Severance Plan) for up to 18 months, and Outplacement Assistance (as defined in the Severance Plan) for 18 months; and (ii) Tier 2 employee is eligible for a cash severance payment equal to 1.0 times the employee's base salary, paid in a lump sum, plus a pro-rated target bonus for the fiscal year in which the termination occurred, Health Benefit Continuation for up to 12 months, and Outplacement Assistance for 12 months. In addition, each Tier 1 and Tier 2 employee was eligible to receive full accelerated vesting of all outstanding equity grants and a one-year time period to exercise any stock options or stock appreciation rights which are not cashed out upon the Change in Control.

Payment of the severance benefits under the Severance Plan was conditioned upon the employee signing a general release of claims in favor of the Company and agreeing to abide by restrictive covenants including maintaining confidential information of the Company, non-solicitation and non-recruitment of Company employees for the Restricted Period (as defined below), non-solicitation of the Company's customers or potential customers during the Restricted Period, non-employment by and limitations on investment in competitors of the Company for the Restricted Period, and no disparagement of the Company. The Restricted Period is twenty-four months for Tier 1 employees and twelve months for Tier 2 employees.

Further, pursuant to the terms of the Participation Agreements, any existing employment or severance agreement between the Company and the participant was immediately terminated and replaced with the provisions of the Severance Plan, subject to limited exceptions required to comply with the requirements of Internal Revenue Code Section 409A.

"Cause" as defined in the Severance Plan meant: (i) the willful and continued failure of the Participant (as defined in the Severance Plan) to perform substantially the Participant's duties with Organovo (other than any such failure resulting from incapacity due to physical or mental illness), as determined by the Board with respect to any Tier 1 or Tier 2 employee, and as determined by Organovo's Chief Executive Officer with respect to employees in Tiers 3 and 4 no earlier than thirty (30) days after a written demand for substantial performance is delivered to the Participant, which specifically identifies the manner in which Organovo believes that the Participant has willfully and continuously failed to perform substantially the Participant's duties with Organovo (provided, however, that with respect to any Tier 1 or Tier 2 employee, the failure to achieve individual or Company-based performance goals, budgets or targets shall not be deemed to be a failure of the Participant to perform his or her duties for purposes of this definition of Cause); (ii) the willful engaging by the Participant in illegal conduct or gross misconduct which is materially and demonstrably injurious to Organovo or Participant's ability to perform his or her duties with Organovo; (iii) conviction (including a plea of guilty or *nolo contendere*) of a felony; (iv) a material violation of a material written policy of Organovo or any affiliate, violation of which would be grounds for immediate dismissal under applicable Company policy; (v) failure to comply in any material respect with the Foreign Corrupt Practices Act, the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Truth in Negotiations Act, or any rules or regulations thereunder; or (vi) a material breach of the restrictive covenants in Section 7(b) of the Severance Plan subject to the cure provisions provided in Section 7(b) of the Severance Plan.

"Change in Control" as defined in the Severance Plan meant the effective date of the occurrence of any of the following events:

- (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act, including for purposes of clarity a "group" (within the meaning of Section 13(d)(3) of the Exchange Act)) becomes the "beneficial owner" (as such term is defined in Rule 13d-3 under the Exchange Act), directly or

indirectly, of securities of Organovo representing more than thirty percent (30%) of the total Fair Market Value (as defined in the Severance Plan) or total combined voting power of Organovo's then-outstanding securities entitled to vote generally in the election of Board directors; provided, however, that a Change in Control shall not be deemed to have occurred if such degree of beneficial ownership results from any of the following: (A) an acquisition by any person or group who on the Effective Date (as defined in the Severance Plan) is the beneficial owner of more than thirty percent (30%) of such voting power, (B) any acquisition directly from Organovo, including, without limitation, pursuant to or in connection with a public offering of securities, (C) any acquisition by Organovo, (D) any acquisition by a trustee or other fiduciary under an employee benefit plan of a participating company, or (E) any acquisition by an entity owned directly or indirectly by the shareholders of Organovo in substantially the same proportions as their ownership of the voting securities of Organovo; or

(ii) an Ownership Change Event (as defined below) or series of related Ownership Change Events (collectively, a "Transaction") in which the shareholders of Organovo immediately before the Transaction do not retain immediately after the Transaction direct or indirect beneficial ownership of more than fifty percent (50%) of the total combined voting power of the outstanding securities entitled to vote generally in the election of Board directors or, in the case of an Ownership Change Event described in clause (iii) of that definition, the entity to which the assets of Organovo were transferred (the "Transferee"), as the case may be; or

(iii) a majority of members of the non-employee Incumbent Directors (as defined below) is replaced during any twelve (12)-month period; or

(iv) a liquidation, winding up or dissolution of the Company;

provided, however, that a Change in Control shall be deemed not to include an event described in subsection (i) until the earlier of (a) the person or group has two or more representatives on the Board or (b) the person or group becomes the "beneficial owner" (as such term is defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of Organovo representing more than fifty percent (50%) of the total Fair Market Value or total combined voting power of Organovo's then-outstanding securities entitled to vote generally in the election of Board directors.

For purposes of subsections (i) and (ii), indirect beneficial ownership included, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own Organovo or the Transferee, as the case may be, either directly or through one or more subsidiary corporations or other business entities.

In addition, for purposes of subsections (i) and (ii), the Compensation Committee was authorized to determine whether multiple acquisitions of the voting securities of Organovo and/or multiple Ownership Change Events are related and to be treated in the aggregate as a single Change in Control, and its determination shall be final, binding and conclusive.

For purposes of this definition of Change in Control, "Incumbent Director" means a director who either (i) is a member of the Board as of the Effective Date or (ii) is elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination (but excluding a director who was elected or nominated in connection with an actual or threatened proxy contest relating to the election of directors of Organovo or at the request of a person or group who is the "beneficial owner" (as such term is defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of Organovo representing more than five percent (5%) of the total Fair Market Value or total combined voting power of Organovo's then-outstanding securities entitled to vote generally in the election of Directors); and "Ownership Change Event" means the occurrence of any of the following with respect to Organovo: (i) the direct or indirect sale or exchange in a single or series of related transactions by the shareholders of Organovo of securities of Organovo representing more than fifty percent (50%) of the total combined voting power of Organovo's then-outstanding securities entitled to vote generally in the election of Board directors; (ii) a merger or consolidation in which Organovo is a party; or (iii) the sale, exchange, or transfer of all or substantially all of the assets or an exclusive license of

all or substantially all of the intellectual property of Organovo (other than a sale, exchange or transfer to one or more subsidiaries of Organovo).”

“Disability” as defined in the Severance Plan meant: incapacity due to physical or mental illness which has rendered the Participant unable effectively to carry out his/her duties and obligations to Organovo or unable to participate effectively and actively in the management of Organovo for a period of ninety (90) consecutive days or for shorter periods aggregating to one-hundred twenty (120) days (whether or not consecutive) during any consecutive twelve (12) months.

“Good Reason” as defined in the Severance Plan meant: without the Participant’s consent:

(i) In the case of a Tier 1, 2, 3, or 4 employee, a material diminution in the Participant’s Base Salary (as defined in the Severance Plan) or Target Bonus potential (as defined in the Severance Plan). This did not apply to a material diminution in the case of a Tier 1 or Tier 2 employee resulting from a determination by both the CEO and the Compensation Committee that Organovo’s financial condition is such that a reduction in compensation is appropriate and the reduction is applied uniformly to all Company officers;

(ii) a material diminution in the Participant’s authority, duties, or responsibilities, which shall include (A) with respect to any Participant who is a member of the Board, any failure of the Board to appoint or the stockholders of Organovo to elect such Participant as a member of the Board, or any removal of Participant from the Board for reasons other than Cause, (B) with respect to any Participant who is a Tier 1 or Tier 2 Employee, removal from Organovo’s executive team;

(iii) with respect to any Participant who is a Tier 1, 2, 3, or 4 employee, a material diminution in the authority, duties, or responsibilities of the supervisor to whom the Participant is required to report;

(iv) any requirement that the Participant relocate, by more than fifty (50) miles, the principal location from which the Participant performs services for Organovo immediately prior to the termination of employment or the occurrence of the Change in Control; or

(v) in the case of any Participant who is a Tier 1, 2, 3, or 4 employee, the occurrence of an event listed in subsections (i), (iii), or (iv) of the definition of “Change in Control”.

#### ***Change in Control under Prior Severance Plan – Advisory Nominee Proposal***

On September 15, 2020, the Company’s stockholders approved the Advisory Nominee Proposal. In connection with the Advisory Nominee Proposal, and pursuant to the Cooperation Agreement, Mr. Crouch, Mr. Kussman and Ms. Bush each resigned from the Company effective September 15, 2020. The appointment of Douglas Jay Cohen, David Gobel and Alison Tjosvold Milhous to the Board constituted a “change in control” under the Severance Plan. Under the Severance Plan, each of Mr. Crouch, Mr. Kussman and Ms. Bush received a cash severance payment equal to two times such executive officer’s base salary, paid in a lump sum, plus a pro-rated target bonus for Fiscal 2021 and will receive health benefit continuation for up to 18 months and outplacement assistance for 18 months. Each executive officer also received full accelerated vesting of all outstanding equity awards and a one-year time period to exercise any stock options.

#### ***Current Severance Arrangement***

As of November 10, 2020, the Company rescinded the Severance Plan, in its entirety, and implemented, for then-newly hired executives, a change in control arrangement, which provides that, in the event the executive is terminated in connection with a Change in Control (“CIC”): the executive will receive (a) in the case of our Executive Chair, 18 months of base salary or consulting fees, as applicable, and (b) in the case of our other executives, 18 months of base salary.

### Potential Payments upon Termination or Change in Control

The following table sets forth the amounts payable to each of our current named executive officers based on an assumed termination as of March 31, 2021 based upon certain designated events.

Name	Cash Severance (\$)	Health and Other Insurance Benefits (\$)	Stock Options (Unvested and Accelerated) (\$)	Restricted Stock Units (Unvested and Accelerated) (\$)	Fiscal Year 2021 Total (\$)(1)
Keith Murphy					
Termination in connection with a Change of Control	\$ 1,170,000	\$ —	\$ —	\$ —	\$ 1,170,000
Thomas Jurgensen					
Termination in connection with a Change of Control	\$ 360,000	\$ —	\$ —	\$ —	\$ 360,000
Jeffrey Miner					
Termination in connection with a Change of Control	\$ 225,000	\$ —	\$ —	\$ —	\$ 225,000

### Death or Disability Benefits

The outstanding equity awards held by our executive officers provide such executive officers with accelerated vesting if the executive officer terminates services with the Company as a result of death or disability. In order for an equity award to be eligible for accelerated vesting, the executive officer's death or disability must occur more than 90 days after the date the equity award was granted. With respect to performance-based equity awards, an executive officer will vest at target levels upon the executive officer's death or disability.

### Summary Compensation Table

The following table summarizes the total compensation paid to or earned by each named executive officer for Fiscal 2021 and Fiscal 2020.

Name and Principal Position	Year or Period	Salary (\$)	Bonus (\$)	Stock Awards (\$) <sup>(1)</sup>	Option Awards (\$) <sup>(2)</sup>	Non-Equity Incentive Plan Compensation (\$) <sup>(3)</sup>	All Other Compensation (\$) <sup>(4)</sup>	Total (\$)
Keith Murphy <sup>(5)</sup> Executive Chairman	2021	354,080	—	205,400	1,801,165	—	—	2,360,645
Thomas Jurgensen General Counsel and Corporate Secretary <sup>(6)</sup>	2021	264,025	—	—	430,821	—	837	695,683
Jeffrey Miner Chief Scientific Officer <sup>(7)</sup>	2021	120,288	—	—	833,028	—	—	953,317
Taylor Crouch Former Chairman, Chief Executive Officer, President <sup>(8)</sup>	2021	302,562	—	—	—	247,271	1,059,320	1,609,153
	2020	515,000	—	989,893	—	128,750	9,766	1,643,409
Craig Kussman Former Chief Financial Officer <sup>(9)</sup>	2021	253,181	—	—	—	152,367	834,390	1,239,9
	2020	396,675	—	394,968	—	79,335	9,774	880,752
Jennifer Kinsbruner Bush, JD Former SVP, General Counsel, Corporate Secretary and Compliance Officer <sup>(10)</sup>	2021	164,958	—	—	—	137,285	719,516	1,021,759
	2020	357,410	—	353,392	—	71,482	9,799	792,083

- (1) These amounts represent the grant date fair value of time-based and performance-based restricted stock unit awards granted by the Company during the periods presented, determined in accordance with FASB ASC Topic 718. All awards are amortized over the vesting life of the award. For the assumptions used in our valuations, see "Note 5 – Stockholders' Equity" of the Notes to Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended March 31, 2021, as filed with the SEC.
- (2) These amounts represent the grant date fair value of time-based stock option awards granted by the Company during the periods presented, determined in accordance with FASB ASC Topic 718. All awards are amortized over the vesting life of the award. For the assumptions

used in our valuations, see “Note 5 – Stockholders’ Equity” of the Notes to Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended March 31, 2021, as filed with the SEC.

- (3) Includes amounts paid under the Company’s Performance-Based Cash Incentive Award program based on the achievement of corporate and individual performance goals established and measured by the Compensation Committee.
- (4) These amounts include matching contributions to the 401(k) Plan made for each named executive officer. The formula for determining the matching contributions is the same for named executive officers as it is for all salaried employees (and are subject to the same statutory maximum). Excludes payments made for the reimbursement of medical insurance premiums and life insurance available for all salaried employees. For more information regarding these benefits, see above under “Other Benefits.”
- (5) Mr. Murphy was appointed our Executive Chairman on September 15, 2020. The amounts reported under “Salary” are comprised of the amounts paid to MDBI for its consulting services. Mr. Murphy did not receive a base salary from the Company in Fiscal 2021 or Fiscal 2020. Mr. Murphy also received compensation for services as a member of the Board of Directors. Mr. Murphy’s additional compensation for Fiscal 2021 is included in the section entitled “Director Compensation Table” on page 30 of this Proxy Statement.
- (6) Mr. Jurgensen was appointed our General Counsel and Corporate Secretary on September 15, 2020. The amounts reported under “Salary” are comprised of (a) \$178,179 paid to Optima Law Group for its consulting services and (b) \$85,846 paid to Mr. Jurgensen as base salary. Mr. Jurgensen’s “All Other Compensation” for Fiscal 2021 includes \$837 for the Company’s matching contribution to the 401(k) plan.
- (7) Dr. Miner was appointed our Chief Scientific Officer on September 15, 2020.
- (8) Mr. Crouch resigned effective September 15, 2020. Mr. Crouch’s “All Other Compensation” for Fiscal 2021 includes \$1,030,000 for severance payments in connection with the Change in Control, \$5,122 for the Company’s matching contribution to the 401(k) plan and \$24,198 in COBRA payments.
- (9) Mr. Kussman resigned effective September 15, 2020. Mr. Kussman’s “All Other Compensation” for Fiscal 2021 includes \$793,350 for severance payments in connection with the Change in Control, \$6,237 for the Company’s matching contribution to the 401(k) plan and \$34,803 in COBRA payments.
- (10) Ms. Bush resigned effective September 15, 2020. Ms. Bush’s “All Other Compensation” for Fiscal 2021 includes \$714,820 for severance payments in connection with the Change in Control and \$4,696 for the Company’s matching contribution to the 401(k) plan.

### ***Outstanding Equity Awards at Fiscal Year End***

The following table shows certain information regarding outstanding equity awards as of March 31, 2021 for our named executive officers:

Name	Option Awards				Stock Awards			
	No. of Securities Underlying Unexercised Options (#) Exercisable	No. of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	No. of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)	Equity Incentive Plan Awards: No. of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$)
Keith Murphy	— <sup>(1)</sup>	65,000	\$ 7.64	9/15/2030	20,000 <sup>(6)</sup>	\$ 192,800		
	— <sup>(2)</sup>	45,000	10.27	3/8/2031				
	— <sup>(3)</sup>	60,000	10.27	3/8/2031				
	— <sup>(4)</sup>	60,000	10.27	3/8/2031				
Thomas Jurgensen	— <sup>(1)</sup>	20,000	7.64	9/15/2030				
	— <sup>(6)</sup>	35,000	10.27	3/8/2031				
Jeffrey Miner	— <sup>(1)</sup>	100,000	7.64	9/15/2030				
	— <sup>(3)</sup>	12,500	10.27	3/8/2031				
	— <sup>(4)</sup>	12,500	10.27	3/8/2031				
Taylor Crouch	104,410 <sup>(7)</sup>	—	54.60	4/24/2027				
	29,999 <sup>(7)</sup>	—	36.80	5/24/2028				
	67,500 <sup>(7)</sup>	—	22.70	8/15/2028				
Craig Kussman	16,499 <sup>(7)</sup>	—	80.20	8/23/2026				
	14,999 <sup>(7)</sup>	—	36.80	5/24/2028				
	33,749 <sup>(7)</sup>	—	22.70	8/15/2028				
Jennifer Kinsbruner Bush, JD	7,499 <sup>(7)</sup>	—	136.80	11/6/2024				
	6,249 <sup>(7)</sup>	—	98.40	6/4/2025				
	4,999 <sup>(7)</sup>	—	79.80	7/11/2026				
	14,166 <sup>(7)</sup>	—	36.80	5/24/2028				
	33,749 <sup>(7)</sup>	—	\$ 22.70	8/15/2028				

- (1) 25% of the option shares vest and become exercisable on September 15, 2021 and the remaining shares vest in 12 equal quarterly installments thereafter.

- (2) 25% of the option shares vest and become exercisable on March 8, 2022 and the remaining shares vest in 12 equal quarterly installments thereafter.
- (3) The option becomes exercisable, if at all, if the 45-day moving average closing price of Organovo Holdings, Inc.'s common stock on The Nasdaq Stock Market LLC exceeds \$20.00 per share.
- (4) The option becomes exercisable, if at all, if the 45-day moving average closing price of Organovo Holdings, Inc.'s common stock on The Nasdaq Stock Market LLC exceeds \$25.00 per share.
- (5) 25% of the shares subject to the restricted stock unit shall vest on March 8, 2022 and the remaining shares vest in 12 equal quarterly installments thereafter.
- (6) 25% of the option shares vest and become exercisable on December 31, 2021 and the remaining shares vest in 12 equal quarterly installments thereafter.
- (7) On September 15, 2020, the Company's stockholders approved the Advisory Nominee Proposal. In connection with the Advisory Nominee Proposal, and pursuant to the Cooperation Agreement, Mr. Crouch, Mr. Kussman and Ms. Bush each resigned from the Company effective September 15, 2020. The appointment of Douglas Jay Cohen, David Gobel and Alison Tjosvold Milhous to the Board constituted a "change in control" under the Severance Plan. Pursuant to the Severance Plan, the vesting of Mr. Crouch's, Mr. Kussman's and Ms. Bush's outstanding options were accelerated, and each of the options is fully exercisable until September 15, 2021.

## **REPORT OF THE AUDIT COMMITTEE**

The following is the report of our Audit Committee with respect to our audited financial statements included in our Annual Report on Form 10-K for the fiscal year ended March 31, 2021, filed with the SEC on June 15, 2021, as amended by Amendment No. 1 on Form 10-K/A, filed with the SEC on July 29, 2021 (the “Form 10-K”). 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 Exchange Act except to the extent that the Company specifically incorporates it by reference in such filing.

The Audit Committee currently consists of three directors, each of whom is an “independent director” as defined under the listing standards for the Nasdaq Capital Market and the rules and regulations of the SEC. The Audit Committee acts pursuant to a written charter that has been adopted by the Board. A copy of the charter is available on the Company’s website at [www.organovo.com](http://www.organovo.com).

The Audit Committee oversees our financial reporting process on behalf of the Board. 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. (“MHM”), 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 MHM to review the financial statements included in the Form 10-K. The Audit Committee discussed with a representative of MHM the matters required to be discussed by the Auditing Standard No. 1301, “Communicating with Audit Committees.” In addition, the Audit Committee met with MHM, with and without management present, to discuss the overall scope of MHM’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 MHM required by Rule 3526 of the Public Company Accounting Oversight Board, Communication with Audit Committee Concerning Independence, and has discussed with MHM its independence, and satisfied itself as to the independence of MHM.

### ***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 each of the fiscal years ended March 31, 2021 and 2020 be included in the Company’s Form 10-K and filed with the SEC.

The Audit Committee of the Board of Directors:

*Alison Tjosvold Milhous (Chair)*

*Douglas Jay Cohen*

*Adam Stern*

## **CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

Since April 1, 2020, there have not been any transactions 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 fiscal year-end for the last two completed fiscal years, 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 (i) the transactions described below and (ii) the compensation arrangements with our executive officers and non-employee directors described in “Executive Compensation” and “Director Compensation,” respectively.

### ***Collaboration Agreement with Viscient***

In November 2019, the Company entered into an agreement with Viscient. Mr. Murphy, our Executive Chairman and member of our Board, is the Chief Executive Officer, Chairman and principal stockholder of Viscient, and Dr. Miner, our Chief Scientific Officer, is a co-founder, the Scientific Officer and a significant stockholder of Viscient. Mr. Murphy is also a 10% or greater stockholder of Viscient. Under this agreement, the Company agreed to sell certain bioprinting equipment and a non-exclusive license to certain intellectual property for approximately \$171,000, of which \$101,000 was recognized as other income and \$70,000 was recognized as revenue in the year ended March 31, 2020. In addition to the services provided by Organovo, Viscient purchased primary human cell-based products from our former subsidiary, Samsara. Pursuant to the terms of multiple Quotes, \$128,000 and \$96,000 was recognized as revenue in the year ended March 31, 2020 and 2019, respectively. The Company had no revenue activity with Viscient for the year ended March 31, 2021. There was \$0 of accounts receivable outstanding as of March 31, 2021, and approximately \$111,000 of accounts receivable outstanding as of March 31, 2020. The balance owing at March 31, 2020 was several months past due (as of that date). The Company and Viscient entered into a Settlement Agreement on June 15, 2020, under which Viscient agreed to pay the full amount due on the invoices in a series of payments to be made by or before October 22, 2020, of which Viscient has paid in full. The agreements and quotes with Viscient do not require the Company to make any payments to Viscient or Mr. Murphy.

Messrs. Stern, Cohen and Gobel (through the Methuselah Foundation and the Methuselah Fund) have invested funds through a convertible promissory note in Viscient, but do not serve as an employee, officer or director of Viscient.

The Company entered into the agreement with Viscient in the ordinary course of business and on terms and conditions it believes are as fair as those it offers and receives from non-related third parties. In addition, the Audit Committee approved the Company’s transactions with Viscient in accordance with the Related Party Transaction Policy and Procedures described below.

### ***Cooperation Agreement with Keith Murphy***

On July 14, 2020, we entered into the Cooperation Agreement with Mr. Murphy. Pursuant to the Cooperation Agreement, the Board appointed Mr. Murphy and Adam Stern as directors on the Board, with terms expiring at our 2020 Annual Meeting of Stockholders, which was held on September 15, 2020. The Board also agreed, in connection with the 2020 Annual Meeting of Stockholders, to recommend, support and solicit proxies for (i) the re-election of Messrs. Murphy and Stern and (ii) an advisory stockholder vote to appoint three individuals, Douglas Jay Cohen, David Gobel and Alison Tjosvold Milhous (collectively, the “Advisory Nominees”), to the Board. Mr. Murphy identified each of the Advisory Nominees.

In accordance with the Cooperation Agreement, we filed a definitive proxy statement for the 2020 Annual Meeting of Stockholders with the SEC on August 6, 2020, in which the Board recommended, supported and solicited proxies for the re-election of Messrs. Murphy and Stern and in favor of the Advisory Nominee Proposal.

### ***Intercompany Agreement with Viscient***

On December 28, 2020, we entered into an intercompany agreement (the “Intercompany Agreement”) with Viscient and Organovo, Inc., our wholly owned subsidiary, which included an asset purchase agreement for certain lab equipment. Pursuant to the Intercompany Agreement, we agreed to provide Viscient certain services related to 3D



bioprinting technology which includes, but is not limited to, histology services, cell isolation, and proliferation of cells, and Viscient agreed to provide us certain services related to 3D bioprinting technology, including bioprinter training, bioprinting services, and qPCR assays, in each case on payment terms specified in the Intercompany Agreement and as may be further determined by the parties. In addition, we and Viscient each agreed to share certain facilities and equipment and, subject to further agreement, to each make certain employees available for specified projects for the other party at prices to be determined in good faith by the parties.

As noted above, Mr. Murphy, our Executive Chairman and member of the Board, is the Chief Executive Officer, Chairman and principal stockholder of Viscient, and Dr. Miner, our Chief Scientific Officer, is a co-founder, the Scientific Officer and a significant stockholder of Viscient. In addition, Messrs. Stern, Cohen and Gobel (through the Methuselah Foundation and the Methuselah Fund) have invested funds through a convertible promissory note in Viscient, but do not serve as an employee, officer or director of Viscient.

### ***Related Party Transaction Policy and Procedures***

Pursuant to our written Related Party Transaction Policy 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 a committee of 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 in this Proxy Statement. 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.

## **PROXY SOLICITATION**

The Company will bear the expenses of calling and holding the Annual Meeting and the soliciting of proxies therefor. This Proxy Statement and the accompanying materials are being made available to stockholders, in accordance with SEC rules, by providing access to these documents on the internet instead of mailing printed copies. Most stockholders will not receive printed copies of the proxy materials unless requested. Instead, the notice provides instructions on how to access and review the proxy materials on the internet. The notice also provides instructions on how to cast your vote via the internet or by telephone. If you would like to receive a printed or email copy of our proxy materials, please follow the instructions for requesting the materials in the notice. The Company may consider the engagement of a proxy solicitation firm. Our directors, officers and employees may also solicit proxies by mail, telephone and personal contact, but they will not receive any additional compensation for these activities.

## STOCKHOLDER PROPOSALS FOR 2022 ANNUAL MEETING

Stockholders interested in submitting a proposal for consideration at our 2022 Annual Meeting must do so by sending the proposal to our Corporate Secretary at Organovo Holdings, Inc., 440 Stevens Ave, Suite 200, Solana Beach, CA 92075. Under the SEC's proxy rules, the deadline for submission of proposals to be included in our proxy materials for the 2022 Annual Meeting is April 7<sup>1</sup>, 2022, which is not more than 120 days prior to the one-year anniversary of the date on which the Company first mailed its proxy materials or a notice of availability of proxy materials (whichever is earlier) for the Annual Meeting (i.e., August 5, 2021). Accordingly, in order for a stockholder proposal to be considered for inclusion in our proxy materials for the 2022 Annual Meeting, any such stockholder proposal must be received by our Corporate Secretary on or before April 7, 2022, and comply with the procedures and requirements set forth in Rule 14a-8 under the Securities Exchange Act of 1934, as well as the applicable requirements of our Bylaws. Any stockholder proposal received after April 7, 2022 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 prior to the one-year anniversary of the date on which the Company first mailed its proxy materials or a notice of availability of proxy materials (whichever is earlier) for the Annual Meeting (i.e., August 5, 2021) and must contain specified information concerning the matters to be brought before such meeting and concerning the stockholder proposing such matters. Therefore, to be presented at our 2022 Annual Meeting, such a proposal must be received by the Company on or after May 22, 2022 but no later than June 21, 2022. If the date of the 2022 Annual Meeting is advanced by more than 30 days, or delayed by more than 60 days, from the one-year anniversary date of the Annual Meeting, notice must be received no earlier than the 120th day prior to such Annual Meeting and not later than the close of business on the later of (i) the 90th day prior to such Annual Meeting or (ii) the 10th day following the day on which the public announcement of the date of such 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 Notice of Internet Availability and, if applicable, the Annual Report, Proxy Statement 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, Inc. stockholder and wish to receive a separate copy of the Notice of Internet Availability and, if applicable, the Annual Report, Proxy Statement and Notice, you may do so by making a written or oral request to: Organovo Holdings, Inc., 440 Stevens Ave, Suite 200, Solana Beach, CA 92075, Attn: Corporate Secretary, telephone (858) 224-1000. Upon your request, we will promptly deliver a separate copy to you. The Annual Report, Proxy Statement and Notice are also available at [www.proxyvote.com](http://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 Notice of Internet Availability and, if applicable, the Annual Report, Proxy Statement and Notice, please notify your broker directly. You may also write to: Continental Stock Transfer and Trust, 1 State Street Plaza, 30th Floor, New York, NY 10004, Attention: Stephen Jones, 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 Notice of Internet Availability and, if applicable, the Annual Report, 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 Organovo Holdings, Inc. at the contact information listed above, to request information about householding.

---

<sup>1</sup> April 7, 2022 is the deadline assuming an August 5, 2021 proxy statement mailing date.

## ANNUAL REPORT ON FORM 10-K

The Company filed an Annual Report on Form 10-K for the year ended March 31, 2021 with the SEC on June 15, 2021 and filed Amendment No. 1 on Form 10-K/A with the SEC on July 29, 2021 (the “Annual Report”). A copy of the Company’s Annual Report will also be made available (without exhibits), free of charge, to interested stockholders upon written request to Organovo Holdings, Inc., 440 Stevens Ave, Suite 200, Solana Beach, CA 92075, Attention: Corporate Secretary. The Annual Report is not incorporated into this Proxy Statement and is not considered to be proxy-soliciting material.

BY ORDER OF THE BOARD OF DIRECTORS

A handwritten signature in black ink, appearing to read 'Thomas Jurgensen', with a long horizontal flourish extending to the right.

Thomas Jurgensen  
*General Counsel and Corporate Secretary*

**Appendix A**

**ORGANOVO HOLDINGS, INC.  
AMENDED AND RESTATED  
2012 EQUITY INCENTIVE PLAN**

[This page intentionally left blank]

[This page intentionally left blank]



