UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K/A

(Amendment No. 1)

		
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△ ANNUAL REPORT PURSUANT TO SECTION 13 OR		
For the Fi	scal Year Ended March 31, 202 OR	41
☐ TRANSITION REPORT PURSUANT TO SECTION 13	_	TIES EVOUANCE ACT OF 1024
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	nsition Period fromto mission File No. 001-35996	
Colli	1111551011 FIRE 140, 001-33990	
ORGANOV	O HOLDING	GS, INC.
(Exact name o	f registrant as specified in its cho	arter)
Delaware		27-1488943
(State or other jurisdiction of incorporation or organization)		(IRS Employer Identification No.)
440 Stevens Ave, Suite 200		
Solana Beach, CA (Address of principal executive offices)		92075 (Zip code)
	number, including area code:	
-	red pursuant to Section 12(b) of	
Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value \$0.001 per share	ONVO	The Nasdaq Capital Market
Securities registered	pursuant to section 12(g) of th	e Act: None
Indicate by check mark if the registrant is a well-known seasoned issuer, as de	efined in Rule 405 of the Securities Act.	Yes □ No ⊠
Indicate by check mark if the registrant is not required to file reports pursuant	to Section 13 or Section 15(d) of the Act	t. Yes □ No ⊠
Indicate by check mark whether the registrant (1) has filed all reports required for such shorter period that the registrant was required to file such reports), and (2)		
Indicate by check mark whether the registrant has submitted electronically ever chapter) during the preceding 12 months (or for such shorter period that the registra		
Indicate by check mark whether the registrant is a large accelerated filer, an addefinitions of "accelerated filer", "large accelerated filer", "smaller reporting comp		
Large accelerated filer □ Non-accelerated filer ⊠		Accelerated filer Smaller reporting company
Tool decelerated mer		Emerging growth company
If an emerging growth company, indicate by check mark if the registrant has estandards provided pursuant to Section 13(a) of the Exchange Act. \Box	elected not to use the extended transition	period for complying with any new or revised financial accounting
Indicate by check mark whether the registrant has filed a report on and attesta Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered pu issued its audit report. \square		ne effectiveness of its internal control over financial reporting under
Indicate by check mark whether the registrant is a shell company (as defined i	in Rule 12b-2 of the Exchange Act). Yes	□ No ⊠
The aggregate market value of the voting and non-voting common equity held 2020, the last trading day of the registrant's second fiscal quarter, was \$41,853,138 10% or greater stockholders have been excluded in that such persons may be deem	. For purposes of this computation only,	
The number of outstanding shares of the registrant's common stock, as of June		
None. DOCUMENT	IS INCORPORATED BY REFERENCE	CE
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EXPLANATORY NOTE

Organovo Holdings, Inc. ("Organovo," the "Company," "we," "our" or "us") is filing this Amendment No. 1 on Form 10-K/A (this "Amendment") to its Annual Report on Form 10-K for the fiscal year ended March 31, 2021 ("Fiscal 2021"), as filed with the Securities and Exchange Commission (the "SEC") on June 15, 2021 (the "Original Form 10-K").

The purpose of this Amendment is solely to disclose the information required in Part III (Items 10, 11, 12, 13 and 14) of the Original Form 10-K, which information was previously omitted from the Original Form 10-K in reliance on General Instruction G(3) to Form 10-K. Accordingly, we hereby amend and replace in its entirety Part III of the Original Form 10-K.

In addition, pursuant to the rules of the SEC, Item 15 of Part IV has been amended to include the currently dated certifications of the Company's principal executive officer and principal financial officer required under Section 302 of the Sarbanes-Oxley Act of 2002. Because no financial statements have been included in this Amendment and this Amendment does not contain or amend any disclosure with respect to Items 307 and 308 of Regulation S-K, paragraphs 3, 4 and 5 of the certifications have been omitted. We are not including the certificate under Section 906 of the Sarbanes-Oxley Act of 2002 as no financial statements are being filed with this Amendment.

Except as described above or as otherwise expressly provided by the terms of this Amendment, no other changes have been made to the Original Form 10-K. Except as otherwise indicated herein, this Amendment continues to speak as of the date of the Original Form 10-K, and we have not updated the disclosure contained therein to reflect any events that occurred subsequent to the date of the Original Form 10-K. This Amendment should be read in conjunction with the Original Form 10-K and with our filings with the SEC subsequent to the date on which the Original Form 10-K was filed.

Organovo Holdings, Inc.

Annual Report on Form 10-K

For the Year Ended March 31, 2021

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PART III

Item 10. Directors, Executive Officers and Corporate Governance.

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.

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 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 current directors:

Name	Age (1)	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.

Class I Director Continuing in Office until the 2021 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), InVivo 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.

Executive Officers

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

<u>Name</u>	<u>Age</u>	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 Salarius 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 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

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.

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.

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.

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.

Item 11. 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 Annual Report on Form 10-K 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.

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):

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

We did not make bonus payments for Fiscal 2021 for Keith Murphy, Thomas Jurgensen or Jeffrey Miner.

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):

Name and Title	Percentage of Prorated Goal(1)	F	iscal 2021 Bonus Award
Taylor Crouch, Former Chief Executive Officer and President	50%	\$	247,271
Craig Kussman, Former Chief Financial Officer	40%	\$	152,367
Jennifer Kinsbruner Bush, JD, Former SVP, General Counsel, Corporate Secretary and Compliance Officer	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>	Stock Option Awards (#)	Stock Awards (#)	Option Awards (\$)(1)	Stock Awards (\$)(2)	Total (\$)
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 Item 8 of this Annual Report on Form 10-K.

⁽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 Item 8 of this Annual Report on Form 10-K.

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 (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 occurs, Health Benefit Continuation (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 occurs, 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 Sec

"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 that certain Cooperation Agreement, by and between us and Keith Murphy, dated as of July 14, 2020 (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 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.

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

		Stock Awards						
Name	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	— (1)	65,000		9/15/2030				
	— (2)	45,000	10.27	3/8/2031				
	— (3)	60,000	10.27	3/8/2031				
	— (4)	60,000	10.27	3/8/2031				
					20,000 (6)	\$ 192,800		
Thomas Jurgensen	— (1)	20,000	7.64	9/15/2030				
	— (6)	35,000	10.27	3/8/2031				
Jeffrey Miner	— (1)	100,000	7.64	9/15/2030				
	— (3)	12,500	10.27	3/8/2031				
m 1 0 1	— (4)	12,500	10.27	3/8/2031				
Taylor Crouch	104,410 (7)	_	54.60	4/24/2027				
	29,999 (7) 67,500 (7)	_	36.80 22.70	5/24/2028 8/15/2028				
Craig Kussman	16,499 (7)		80.20	8/23/2026				
Claig Russillaii	14,999 (7)		36.80	5/24/2028				
	33,749 (7)	_	22.70	8/15/2028				
Jennifer Kinsbruner Bush, JD	7,499 (7)	_	136.80	11/6/2024				
	6,249 (7)	_	98.40	6/4/2025				
	4,999 (7)	_	79.80	7/11/2026				
	14,166 (7)	_	36.80	5/24/2028				
	33,749 (7)	_	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.
- 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.

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	Audit Committee		mpensation Committee	Corporate Governance Committee	
Committee Chair	\$	25,000	\$ 25,000	\$	25,000
Committee Member (excluding Chair)	\$	15,000	\$ 15,000	\$	15,000

Nominating and

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:

Name (1)	ees Earned or Paid in Cash (\$)		Stock Awards (\$)		Option Awards (\$)(2)	C	All Other Compensation (\$)(3)	Total (\$)
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" above.
- (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 Item 8 of this Annual Report on Form 10-K.
- (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" above.
- (7) Mr. Kessel, Dr. Malloy and Ms. Beaver each resigned from the Board on September 15, 2020.
- (8) Pursuant to that the Cooperation Agreement, Mr. Maroun and Dr. Shapiro resigned from the Board on July 14, 2020.

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.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

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 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 Annual Report on Form 10-K); 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 sixty 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
5% Stockholders	Sildres	Silares
ARK Investment Management, LLC	674,454 (2)	7.7%
Sumitomo Mitsui Trust Holdings, Inc.	478,570 (3)	5.2%
Directors and Named Executive Officers		
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 adviser 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, Chyoda-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.

Securities Authorized for Issuance Under Equity Compensation Plans.

The following table summarizes information about the Company's equity compensation plans by type as of March 31, 2021:

	(A) Number of securities to be issued upon exercise/vesting	(B) Weighted-average exercise price	(C) Number of securities available for future issuance under Equity Compensation Plans
Plan category	of outstanding options, warrants, units and rights	of outstanding options, warrants, units and rights	(excluding securities reflected in column (A))
Equity compensation plans approved by security holders (1)	933,531 (2)	\$ 15.45	123,194 (3)
Equity compensation plans not approved by security holders (4)	104,410 (5)	\$ 54.60	750,000 (6)

- (1) Includes the 2008 Plan, the 2012 Plan, and 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.
- (3) Includes 59,435 shares of common stock available for purchase under the ESPP as of March 31, 2021.
- (4) Includes the Inducement Award Agreements and the Inducement Plan

- (5) Includes 104,410 stock options 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 2012 Plan, the terms and conditions of the award pursuant to the Inducement Award Agreements is consistent with awards granted to the Company's executive officers pursuant to the 2012 Plan.
- (6) Includes 750,000 shares of common stock reserved for issuance pursuant to the Inducement Plan.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

Director 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.

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.

Item 14. Principal Accountant Fees and Services.

Audit and Non-Audit Fees

Our Audit Committee is responsible for, and has approved, the engagement of Mayer Hoffman McCann P.C. ("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.

	F	iscal Year 2021	Fiscal Year 2020	
Audit fees	\$	312,029 \$	346,955	
Audit-related fees			_	
Tax fees		31,027	40,000	
All other fees		_	_	
Total	\$	343,056 \$	386,955	

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.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

- (a). The following documents have been filed as part of this Amendment:
 - 1. Consolidated Financial Statements: No financial statements are filed with this Amendment. The financial statements were included in Item 8 of Part II of the Original Form 10-K.
 - 2. Financial Statement Schedules: None.
 - 3. Exhibits: The exhibits listed in the Exhibit Index attached to this report are filed or incorporated by reference as part of this Amendment.
- (b). The exhibits listed in the accompanying Exhibit Index are filed or incorporated by reference as part of this Amendment.

EXHIBIT INDEX

Exhibit No.	Description
2.1	Agreement and Plan of Merger and Reorganization, dated as of December 13, 2019, by and among the Company, Opal Merger Sub, Inc. and Tarveda Therapeutics, Inc. (incorporated by reference from Exhibit 2.1 to the Company's Current Report on Form 8-K, as filed with the SEC on December 16, 2019).
2.2	First Amendment to Merger Agreement, dated as of January 26, 2020, by and among the Company, Opal Merger Sub, Inc. and Tarveda Therapeutics, Inc. (incorporated by reference from Exhibit 2.1 to the Company's Current Report on Form 8-K, as filed with the SEC on January 29, 2020).
3.1	Certificate of Incorporation of Organovo Holdings, Inc. (Delaware) (incorporated by reference from Exhibit 3.1 to the Company's Current Report on Form 8-K, as filed with the SEC on February 3, 2012).
3.2	Certificate of Amendment of Certificate of Incorporation of Organovo Holdings, Inc. (incorporated by reference from Exhibit 3.1 to the Company's Current Report on Form 8-K, as filed with the SEC on July 27, 2018).
3.3	Certificate of Second Amendment of Certificate of Incorporation of Organovo Holdings, Inc. (incorporated by reference from Exhibit 3.1 to the Company's Current Report on Form 8-K as filed with the SEC on August 17, 2020).
3.4	Bylaws of Organovo Holdings, Inc. (Delaware) (incorporated by reference from Exhibit 3.2 to the Company's Current Report on Form 8-K, as filed with the SEC on February 3, 2012).
3.5	Amendment to Bylaws of Organovo Holdings, Inc., dated October 10, 2019 (incorporated by reference from Exhibit 99.1 to the Company's Current Report on Form 8-K, as filed with the SEC on October 11, 2019).
4.1‡	Description of Securities.
10.1+	Organovo, Inc. 2008 Equity Incentive Plan (incorporated by reference from Exhibit 10.14 to the Company's Current Report on Form 8-K, as filed with the SEC on February 13, 2012).
10.2+	Organovo Holdings, Inc. 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.15 to the Company's Current Report on Form 8-K, as filed with the SEC on February 13, 2012).
10.3+	Form of Stock Option Award Agreement under the 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.16 to the Company's Current Report on Form 8-K, as filed with the SEC on February 13, 2012).
10.4+	Form of Indemnification Agreement (incorporated by reference from Exhibit 10.17 to the Company's Current Report on Form 8-K, as filed with the SEC on February 13, 2012).
10.5†	<u>License Agreement dated as of March 24, 2009, by and between Organovo, Inc. and the Curators of the University of Missouri (incorporated by reference from Exhibit 10.23 to the Company's Current Report on Form 8-K, as filed with the SEC on May 11, 2012).</u>
10.6†	<u>License Agreement dated as of March 12, 2010 by and between the Company and the Curators of the University of Missouri (incorporated by reference from Exhibit 10.24 to the Company's Current Report on Form 8-K, as filed with the SEC on May 11, 2012).</u>
10.7†	<u>License Agreement dated as of May 2, 2011, by and between the Company and Clemson University Research Foundation (incorporated by reference from Exhibit 10.25 to the Company's Current Report on Form 8-K, as filed with the SEC on May 11, 2012).</u>
10.8	First Amendment to Lease, dated December 4, 2013, by and between Organovo, Inc. and ARE-SD Region No. 25, LLC. (incorporated by reference from Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on February 6, 2014).
10.9+	Form of Non-Employee Director Stock Option Award Agreement under the 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.35 to the Company's Annual Report on Form 10-K, as filed with the SEC on June 9, 2015).
10.10+	Form of Executive Stock Option Award Agreement under the 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.36 to the Company's Annual Report on Form 10-K, as filed with the SEC on June 9, 2015).
10.11+	Organovo Holdings, Inc. Severance and Change in Control Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 9, 2015).
10.12+	Amendment to the Organovo Holdings, Inc. Severance and Change in Control Plan, dated May 19, 2020 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on May 20, 2020).
10.13+	Form of Organovo Holdings, Inc. Severance and Change in Control Plan Participation Agreement (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 9, 2015).
10.14+	Offer Letter, between Craig Kussman and Organovo Holdings, Inc., dated July 29, 2016 (incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K, as filed with the SEC on August 2, 2016).

Exhibit No.	Description
10.15+	Form of Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement (Retention Form) under the 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on August 4, 2016).
10.16+	Form of Employee Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement under the 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on August 4, 2016).
10.17+	Form of Non-Employee Director Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement under the 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on August 4, 2016).
10.18+	Organovo Holdings, Inc. 2016 Employee Stock Purchase Plan (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on August 18, 2016).
10.19+	Offer Letter, dated April 11, 2017, by and between Organovo Holdings, Inc. and Taylor Crouch (incorporated by reference from Exhibit 10.2 to the Company's Current Report on Form 8-K, as filed with the SEC on April 11, 2017).
10.20+	Organovo Holdings, Inc. Inducement Award Stock Option Agreement, dated April 24, 2017 (incorporated by reference from Exhibit 99.1 to the Company's Registration Statement on Form S-8 (File No. 333-217437), as filed with the SEC on April 24, 2017).
10.21+	Organovo Holdings, Inc. Inducement Award Performance-Based Restricted Stock Unit Agreement, dated April 24, 2017 (incorporated by reference from Exhibit 99.2 to the Company's Registration Statement on Form S-8 (File No. 333-217437), as filed with the SEC on April 24, 2017).
10.22+	Organovo Holdings, Inc. Amended and Restated 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on July 27, 2018).
10.23+	Organovo Holdings, Inc. Inducement Award Stock Option Agreement, dated August 14, 2018 (incorporated by reference from Exhibit 99.1 to the Company's Registration Statement on Form S-8 (File No. 333-226837), as filed with the SEC on August 14, 2018).
10.24+	Organovo Holdings, Inc. Inducement Award Restricted Stock Unit Agreement, dated August 14, 2018 (incorporated by reference from Exhibit 99.2 to the Company's Registration Statement on Form S-8 (File No. 333-226837), as filed with the SEC on August 14, 2018).
10.25+	Consulting Agreement, dated September 15, 2020, by and between Organovo and Multi Dimensional Bio Insight LLC. (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 5, 2020).
10.26+	Consulting Agreement, dated August 25, 2020, by and between Organovo and Danforth Advisors (incorporated by reference from Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 5, 2020).
10.27+	Offer Letter, dated September 15, 2020, between the Company and Jeffrey N. Miner (incorporated by reference from Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 5, 2020).
10.28	Engagement Agreement, dated July 23, 2020, by and between Organovo and Optima Law Group of San Diego (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 5, 2020).
10.29	Lease Agreement dated November 23, 2020, between Organovo Holdings, Inc. and San Diego Inspire 1, LLC (Temporary Lease Agreement 176647423.3) (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on November 25, 2020).
10.30	Lease Agreement dated November 23, 2020, between Organovo Holdings, Inc. and San Diego Inspire 1, LLC (Permanent Lease Agreement 176640186.8) (incorporated by reference from Exhibit 10.2 to the Company's Current Report on Form 8-K, as filed with the SEC on November 25, 2020).
10.31#	<u>Intercompany Agreement, dated December 28, 2020, by and among Organovo Holdings, Inc., Organovo, Inc. and Viscient Biosciences, Inc. (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on December 31, 2020).</u>
10.32+	Offer Letter, dated December 28, 2020, between the Company and Tom Jurgensen (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on February 8, 2021).
10.33	Sales Agreement, dated March 16, 2018, by and among Organovo Holdings, Inc., H.C. Wainwright & Co., LLC and JonesTrading Institutional Services LLC. (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on March 16, 2018).

Exhibit No.	Description
10.34#	Organovo Holdings, Inc. Amended and Restated 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.1 to the Company's
	Current Report on Form 8-K, as filed with the SEC on March 10, 2021).
10.35#	Organovo Holdings, Inc. 2021 Inducement Equity Incentive Plan (incorporated by reference from Exhibit 10.2 to the Company's Current
	Report on Form 8-K, as filed with the SEC on March 10, 2021).
10.36#	Form of Stock Option Agreement under the Organovo Holdings, Inc. 2021 Inducement Equity Incentive Plan (incorporated by reference from Exhibit 4.2 to the Company's Registration Statement on Form S-8 (File No. 333-254714), as filed with the SEC on March 25, 2021).
10.37#	Form of Restricted Stock Unit Agreement under the Organovo Holdings, Inc. 2021 Inducement Equity Incentive Plan (incorporated by
	reference from Exhibit 4.3 to the Company's Registration Statement on Form S-8 (File No. 333-254714), as filed with the SEC on March 25, 2021).
21.1‡	Subsidiaries of Organovo Holdings, Inc.
23.1‡	Consent of Independent Registered Public Accounting Firm.
24.1‡	Power of Attorney (incorporated by reference to Exhibit 24.1 to the Company's Annual Report on Form 10-K filed with the SEC on June 15,
	<u>2021).</u>
31.1‡	Certification of Chief Executive Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2‡	Certification of Chief Financial Officer a Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.3*	Certification of Chief Executive Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.4*	Certification of Chief Financial Officer a Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1‡	Certifications Required Under Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and to 18 U.S.C. Section 1350.
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase
101.DEF*	XBRL Taxonomy Extension Definition Linkbase
101.LAB*	XBRL Taxonomy Extension Label Linkbase
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase

- * Filed herewith.
- + Designates management contracts and compensation plans.
- † This Exhibit has been filed separately with the Secretary of the Securities and Exchange Commission without the redaction pursuant to a Confidential Treatment Request under Rule 24b-2 of the Securities Exchange Act of 1934, as amended.
- # Certain identified information has been omitted pursuant to Item 601(b)(10) of Regulation S-K because such information is both (i) not material and (ii) would likely cause competitive harm to the Registrant if publicly disclosed. The Registrant hereby undertakes to furnish supplemental copies of the unredacted exhibit upon request by the Securities and Exchange Commission.
- ‡ Previously filed.

SIGNATURES

Pursuant to the requirements of the Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

ORGANOVO HOLDINGS, INC.

By: /s/ Keith Murphy

Keith Murphy Executive Chairman

Date: July 29, 2021

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, Keith Murphy, Executive Chairman of Organovo Holdings, Inc., certify that:
- 1. I have reviewed this Amendment No. 1 to the Annual Report on Form 10-K of Organovo Holdings, Inc.; and
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Dated: July 29, 2021 /s/ Keith Murphy

Keith Murphy Executive Chairman

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, Jonathan Lieber, Chief Financial Officer of Organovo Holdings, Inc., certify that:
- 1. I have reviewed this Amendment No. 1 to the Annual Report on Form 10-K of Organovo Holdings, Inc.; and
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Dated: July 29, 2021 /s/ Jonathan Lieber

Jonathan Lieber Chief Financial Officer (Principal Financial Officer)