

---

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

---

**SCHEDULE 14A**

**Proxy Statement Pursuant to Section 14(a) of the  
Securities Exchange Act of 1934  
(Amendment No. )**

---

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

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

**Organovo Holdings, Inc.**

(Name of Registrant as Specified In Its Charter)

**Not Applicable**

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

Payment of Filing Fee (Check all boxes that apply):

- No fee required.
  - Fee paid previously with preliminary materials.
  - Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11.
- 
-

ORGANOVO HOLDINGS, INC.  
 11555 SORRENTO VALLEY ROAD, SUITE 100  
 SAN DIEGO, CA 92121



**VOTE BY INTERNET**  
*Before The Meeting* - Go to [www.proxyvote.com](http://www.proxyvote.com) or scan the QR Barcode above

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 p.m. Eastern Time on September 6, 2022. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

*During The Meeting* - Go to [www.virtualshareholdermeeting.com/ONVO2022](http://www.virtualshareholdermeeting.com/ONVO2022)

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

**VOTE BY PHONE - 1-800-690-6903**

Use any touch-tone telephone to transmit your voting instructions up until 11:59 p.m. Eastern Time September 6, 2022. Have your proxy card in hand when you call and then follow the instructions.

**VOTE BY MAIL**

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

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

D88939-P76238

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

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

<p><b>ORGANOVO HOLDINGS, INC.</b>  <b>The Board of Directors recommends you vote FOR the following:</b></p>			
<p>1. To elect each of Douglas Jay Cohen and David Gobel as a Class II director to hold office until the 2025 Annual Meeting of Stockholders and until his respective successor is elected and qualified.</p>			
<b>Nominees:</b>	<b>For</b>	<b>Withhold</b>	
1a. Douglas Jay Cohen	<input type="checkbox"/>	<input type="checkbox"/>	
1b. David Gobel	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>The Board of Directors recommends you vote FOR proposals 2, 3 and 4.</b></p>			
	<b>For</b>	<b>Against</b>	<b>Abstain</b>
2. To ratify the appointment of Mayer Hoffman McCann P.C. as our independent registered public accounting firm for the fiscal year ending March 31, 2023.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. To approve, on an advisory basis, the compensation of our named executive officers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. To approve the Organovo Holdings, Inc. 2022 Equity Incentive Plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>NOTE:</b> In their discretion, the proxies are authorized to vote upon such other business as may properly come before the meeting or any adjournment thereof.</p>			
<p>Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.</p>			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Signature [PLEASE SIGN WITHIN BOX]	Date	Signature (Joint Owners)	Date

You are cordially invited to attend our 2022 Annual Meeting of Stockholders, to be held virtually via live webcast at [www.virtualshareholdermeeting.com/ONVO2022](http://www.virtualshareholdermeeting.com/ONVO2022) at 9:00 a.m. Pacific Time on September 7, 2022.

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

D88940-F76238

**ORGANOVO HOLDINGS, INC.  
Annual Meeting of Stockholders  
September 7, 2022, 9:00 a.m. Pacific Time  
This proxy is solicited by the Board of Directors**

The undersigned hereby appoints Keith Murphy and Tom Jurgensen, or either of them, as proxies, each with the power to appoint his substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side of this proxy, all of the shares of Common Stock of ORGANOVO HOLDINGS, INC. that the undersigned is entitled to vote at the Annual Meeting of Stockholders to be held at 9:00 a.m. Pacific Time on September 7, 2022, via live webcast at [www.virtualshareholdermeeting.com/ONVO2022](http://www.virtualshareholdermeeting.com/ONVO2022) and any adjournment or postponement thereof.

**THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED IN THE MANNER DIRECTED HEREIN. IF NO SUCH DIRECTION IS MADE, THIS PROXY WILL BE VOTED "FOR" THE NOMINEES FOR THE BOARD OF DIRECTORS LISTED IN PROPOSAL 1 ON THE REVERSE SIDE AND "FOR" PROPOSALS 2, 3 AND 4.**

Continued and to be signed on reverse side

# Your **Vote** Counts!

**ORGANOVO HOLDINGS, INC.**

2022 Annual Meeting  
Vote by September 6, 2022  
11:59 PM ET

ORGANOVO HOLDINGS, INC.  
11555 SORRENTO VALLEY ROAD, SUITE 100  
SAN DIEGO, CA 92121



D88951-P76238

## You invested in **ORGANOVO HOLDINGS, INC.** and it's time to vote!

You have the right to vote on proposals being presented at the Annual Meeting. **This is an important notice regarding the availability of proxy material for the stockholder meeting to be held on September 7, 2022.**

### Get informed before you vote

View the Notice and Proxy Statement and Annual Report online OR you can receive a free paper or email copy of the material(s) by requesting prior to August 24, 2022. If you would like to request a copy of the material(s) for this and/or future stockholder meetings, you may (1) visit [www.ProxyVote.com](http://www.ProxyVote.com), (2) call 1-800-579-1639 or (3) send an email to [sendmaterial@proxyvote.com](mailto:sendmaterial@proxyvote.com). If sending an email, please include your control number (indicated below) in the subject line. Unless requested, you will not otherwise receive a paper or email copy.



For complete information and to vote, visit [www.ProxyVote.com](http://www.ProxyVote.com)

Control #

#### Smartphone users

Point your camera here and vote without entering a control number



#### Vote Virtually at the Meeting\*

September 7, 2022  
9:00 a.m. Pacific Time

Virtually at:  
[www.virtualshareholdermeeting.com/ONVO2022](http://www.virtualshareholdermeeting.com/ONVO2022)

\*Please check the meeting materials for any special requirements for meeting attendance.

## THIS IS NOT A VOTABLE BALLOT

This is an overview of the proposals being presented at the upcoming stockholder meeting. Please follow the instructions on the reverse side to vote these important matters.

Voting Items	Board Recommends
1. To elect each of Douglas Jay Cohen and David Gobel as a Class II director to hold office until the 2025 Annual Meeting of Stockholders and until his respective successor is elected and qualified.	
<b>Nominees:</b>	
1a. Douglas Jay Cohen	✔ For
1b. David Gobel	✔ For
2. To ratify the appointment of Mayer Hoffman McCann P.C. as our independent registered public accounting firm for the fiscal year ending March 31, 2023.	✔ For
3. To approve, on an advisory basis, the compensation of our named executive officers.	✔ For
4. To approve the Organovo Holdings, Inc. 2022 Equity Incentive Plan.	✔ For
<b>NOTE:</b> In their discretion, the proxies are authorized to vote upon such other business as may properly come before the meeting or any adjournment thereof.	

Prefer to receive an email instead? While voting on [www.ProxyVote.com](http://www.ProxyVote.com), be sure to click "Sign up for E-delivery".