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 \square Filed by a Party other than the Registrant \square

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

I Definitive Additional Materials

□ Soliciting Material Pursuant to §240.14a-12

Mustang Bio, Inc.

(Name of Registrant as Specified in its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

No fee required.

- \Box Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
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 - (2) Aggregate number of securities to which transaction applies:
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□ Fee paid previously with preliminary materials.

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(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:



MUSTANG BIO, INC. 377 Plantation Street Worcester, Massachusetts 01605

THESE SUPPLEMENTAL PROXY MATERIALS PROVIDE ADDITIONAL INFORMATION REGARDING THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON WEDNESDAY, JUNE 17, 2020

On June 4, 2020, Mustang Bio, Inc. (the "Company") issued a press release, a copy of which is attached hereto, related to a change to the format of the Company's 2020 Annual Meeting of Stockholders (the "2020 Annual Meeting") to be held on Wednesday, June 17, 2020. As described below, due to continued public health concerns resulting from the coronavirus ("COVID-19") outbreak, and government-recommended and required limits on public gatherings and to protect the health and safety of the Company's stockholders, directors and employees, the 2020 Annual Meeting will now be held in a virtual-only meeting format.

The Notice of Change to a Virtual Meeting Format, a copy of which is also attached hereto, supplements the 2020 Notice of Annual Meeting of Stockholders and Proxy Statement (the "Proxy Statement") of the Company filed with the Securities and Exchange Commission (the "SEC") on April 29, 2020 and subsequently mailed or made available to the Company's stockholders in connection with the solicitation of proxies by the Company's Board of Directors for use at the 2020 Annual Meeting. The Company's Proxy Statement and 2019 Annual Report are available on the Company's website at www.mustangbio.com.

These supplemental proxy materials are being filed with the SEC and are being made available to stockholders on or about June 4, 2020. Except as amended or supplemented by the information contained in this supplement, all information set forth in the Proxy Statement continues to apply and should be considered in voting your shares.

THIS NOTICE SHOULD BE READ IN CONJUNCTION WITH THE PROXY STATEMENT



Mustang Bio to Host Virtual Annual Meeting of Stockholders

Worcester, MA – June 4, 2020 – Mustang Bio, Inc. ("Mustang") (NASDAQ: MBIO), a clinical-stage biopharmaceutical company focused on translating today's medical breakthroughs in cell and gene therapies into potential cures for hematologic cancers, solid tumors and rare genetic diseases, today announced that it will host the Company's 2020 Annual Meeting of Stockholders ("Annual Meeting") virtually due to public health concerns resulting from the coronavirus ("COVID-19") outbreak, and government-recommended and required limits on public gatherings. Holding the Annual Meeting online will also protect the health and safety of the Company's stockholders, directors and employees.

The Annual Meeting will begin at 3:00 p.m. Eastern Time on Wednesday, June 17, 2020, and will be conducted in a virtual format only. Stockholders will not be able to attend the Annual Meeting in person; however, stockholders of record as of the close of business on April 20, 2020 will be able to vote through the online platform.

Investors can access the virtual Annual Meeting and participate in the following ways:

- Visit www.virtualshareholdermeeting.com/mbio2020 and enter the 16-digit control number included on your Important Notice Regarding the Availability of Proxy Materials, on your proxy card, or on the instructions that accompanied your proxy materials.
- · Log into the meeting platform beginning at 2:45 p.m. Eastern Time on June 17, 2020.
- · Vote during the Annual Meeting by following the instructions available on the meeting website. If you have already voted, no additional action is required.

If you encounter any technical difficulties with the virtual meeting platform on the meeting day, a phone number for technical support will be provided on the meeting page at www.virtualshareholdermeeting.com/mbio2020. Technical support will be available beginning at 2:45 p.m. Eastern Time on June 17, 2020 and will remain available until the meeting has ended.

Whether or not stockholders plan to attend the virtual Annual Meeting, Mustang urges stockholders to select one of the methods described in the proxy materials to vote and submit their proxies in advance of the Annual Meeting.

About Mustang Bio

Mustang Bio, Inc. ("Mustang") is a clinical-stage biopharmaceutical company focused on translating today's medical breakthroughs in cell and gene therapies into potential cures for hematologic cancers, solid tumors and rare genetic diseases. Mustang aims to acquire rights to these technologies by licensing or otherwise acquiring an ownership interest, to fund research and development, and to outlicense or bring the technologies to market. Mustang has partnered with top medical institutions to advance the development of CAR T therapies across multiple cancers, as well as a lentiviral gene therapy for XSCID. Mustang is registered under the Securities Exchange Act of 1934, as amended, and files periodic reports with the U.S. Securities and Exchange Commission ("SEC"). Mustang was founded by Fortress Biotech, Inc. (NASDAQ: FBIO). For more information, visit www.mustangbio.com.

Company Contacts:

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OF ANNUAL MEETING OF STOCKHOLDERS

Wednesday, June 17, 2020 at 3:00 p.m. Eastern Time Virtual Meeting - No Physical Meeting Location

To the Stockholders of Mustang Bio, Inc.:

In light of the coronavirus outbreak ("COVID-19"), public health concerns, and government-recommended and required limits on public gatherings, and to prioritize the health and well-being of our stockholders, directors, employees and other meeting participants, NOTICE IS HEREBY GIVEN that the location of our 2020 Annual Meeting of Stockholders (the "Annual Meeting") has been changed and will be conducted in virtual format only.

The meeting will be held at 3:00 p.m. Eastern Time on June 17, 2020. As described in the proxy materials for the Annual Meeting previously distributed, stockholders of record as of the close of business on April 20, 2020 will be able to vote during the meeting by remote participation.

To participate in the Annual Meeting, visit http://www.virtualshareholdermeeting.com/mbio2020 and enter the 16-digit control number included on your Important Notice Regarding the Availability of Proxy Materials, on your proxy card, or on the instructions that accompanied your proxy materials. You may log into the meeting platform beginning at 2:45 p.m. Eastern Time on June 17, 2020. The proxy card included with the proxy materials previously distributed will not be updated to reflect the change in location and may continue to be used to vote your shares in connection with the Annual Meeting. If you have already voted, no additional action is required.

You may vote during the Annual Meeting by following the instructions available on the meeting website during the meeting.

A list of stockholders entitled to vote at the Annual Meeting will be available for examination for any purpose germane to the Annual Meeting for ten days prior to the Annual Meeting. You may email Mustang Bio, Inc. at ir@mustangbio.com to coordinate arrangements to view the stockholder list. The stockholder list will also be available during the Annual Meeting at http://www.virtualshareholdermeeting.com/mbio2020.

If you encounter any technical difficulties with the virtual meeting platform on the meeting day, a phone number for technical support will be provided on the meeting page at http://www.virtualshareholdermeeting.com/mbio2020. Technical support will be available beginning at 2:45 p.m. Eastern Time on June 17, 2020 and will remain available until the meeting has ended.

We thank you for your interest in our company and look forward to your participation at our virtual Annual Meeting.

By Order of the Board of Directors,

<u>/s/ Robyn Hunter</u> Robyn Hunter Corporate Secretary

June 4, 2020 Worcester, Massachusetts