

**INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF
SECURITIES**

OMB APPROVAL	
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Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>Longitude Prime Partners, LLC</u> (Last) (First) (Middle) 2740 SAND HILL ROAD, SECOND FLOOR (Street) MENLO PARK CA 94025 (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 07/19/2021	3. Issuer Name and Ticker or Trading Symbol <u>RAPID MICRO BIOSYSTEMS, INC.</u> [RPID]	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input type="checkbox"/> Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Class A Common Stock	150,000 ⁽¹⁾	I	Held by Longitude Prime Fund, L.P. ⁽²⁾

**Table II - Derivative Securities Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			

1. Name and Address of Reporting Person*
Longitude Prime Partners, LLC
 (Last) (First) (Middle)
 2740 SAND HILL ROAD, SECOND FLOOR
 (Street)
 MENLO PARK CA 94025
 (City) (State) (Zip)

1. Name and Address of Reporting Person*
Longitude Prime Fund, L.P.
 (Last) (First) (Middle)
 2740 SAND HILL ROAD, SECOND FLOOR
 (Street)
 MENLO PARK CA 94025
 (City) (State) (Zip)

Explanation of Responses:

1. Represents shares purchased in the Issuer's initial public offering. Not included on this Form 3 are an additional 3,407,952 shares of Class A Common Stock and warrants to purchase an aggregate of 634,595 shares of Class A Common Stock held by Longitude Venture Partners II, L.P. ("LVP II"). LVP II, Longitude Capital Partners II, LLC, Patrick G. Enright and Juliet Tammenoms Bakker have separately filed a Form 4 in connection with the acquisition of the shares of Class A Common Stock described in this Form.

2. The securities are held directly by Longitude Prime Fund, L.P. ("LPF"). Longitude Prime Partners, LLC ("LPP"), the general partner of LPF, may be deemed to have voting and investment power with respect to the shares held by LPF. Mr. Enright and Ms. Tammenoms Bakker are the managing members of LPP and may be deemed to have voting, investment and dispositive power over the shares held by LPF. LPP and each of Mr. Enright and Ms. Tammenoms Bakker disclaim beneficial ownership of such shares except to the extent of their respective pecuniary interests therein.

Remarks:

<u>Longitude Prime Partners, LLC, By: /s/ Patrick Enright, managing member</u>	<u>07/20/2021</u>
<u>Longitude Prime Fund, L.P., By: /s/ Patrick Enright, managing member of the general partner</u>	<u>07/20/2021</u>
** Signature of Reporting Person	Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 5 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

POWER OF ATTORNEY

With respect to holdings of and transactions in securities issued by Rapid Micro Biosystems, Inc. (the "Company"), the undersigned hereby constitutes and appoints the individuals named on Schedule A attached hereto and as may be amended from time to time, or any of them signing singly, with full power of substitution and resubstitution, to act as the undersigned's true and lawful attorney-in-fact to:

1. prepare, execute in the undersigned's name and on the undersigned's behalf, and submit to the United States Securities and Exchange Commission (the "SEC") a Form ID, including amendments thereto, and any other documents necessary or appropriate to obtain and/or regenerate codes and passwords enabling the undersigned to make electronic filings with the SEC of reports required by Section 16(a) of the Securities Exchange Act of 1934, as amended, or any rule or regulation of the SEC;
2. execute for and on behalf of the undersigned, Forms 3, 4, and 5 in accordance with Section 16 of the Securities Exchange Act of 1934, as amended, and the rules thereunder;
3. do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form 3, 4, or 5, complete and execute any amendment or amendments thereto, and timely file such form with the SEC and any stock exchange or similar authority; and
4. take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution and resubstitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorneys-in-fact substitute or substitutes, shall lawfully do or cause to be done by virtue of this Power of Attorney and the rights and powers herein granted.

The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934, as amended.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4, and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 16th day of March, 2021.

Signature: /s/ David Hirsch

Print Name: David Hirsch

Schedule A

Individuals Appointed as Attorney-in-Fact with Full Power of

Substitution and Resubstitution

Robert Spignesi

Sean Wirtjes

Jonathan Paris