FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

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INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

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

Name and Address of Reporting Person Longitude Capital Partners II LLC	Requirin (Month/E	2. Date of Event Requiring Statement Month/Day/Year) 07/14/2021 3. Issuer Name and Ticker or Trading Symbol RAPID MICRO BIOSYSTEMS, INC. [RPID]									
(Last) (First) (Middle) 2740 SAND HILL ROAD,			4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director X 10% Owner					5. If Amendment, Date of Original Filed (Month/Day/Year)			
SECOND FLOOR			Officer (give title below) Officer (give below)				Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting				
(Street) MENLO PARK CA 94025						X	Person X Form filed by More than One Reporting Person				
(City) (State) (Zip)											
Table I - Non-Derivative Securities Beneficially Owned											
1. Title of Security (Instr. 4)			2. Amount of Securities Beneficially Owned (Instr. 4) 3. Owners Form: Dir (D) or Ind (I) (Instr. 9)			irect direct	rect Ownership (Instr. 5) lirect				
Class A Common Stock			63,914	I			By Longitude Venture Partners II, L.P. ⁽¹⁾				
Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)											
1. Title of Derivative Security (Instr. 4)	2. Date Exerc Expiration Day/ (Month/Day/	ate	3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)			-0			6. Nature of Indirect Beneficial Ownership (Instr.		
	Date Exercisable	Expiration Date Title		Nu	nount or mber of ares			or Indirect (I) (Instr. 5)	5)		
Series A1 Preferred Stock	(2)	(2)	Class A Common Stock	1,754,801		(2)		I	Held by Longitude Venture Partners II, L.P.		
Series B1 Preferred Stock	(2)	(2)	Class A Common Stock	1,130,904		(2)		I	Held by Longitude Venture Partners II, L.P.		
Series C1 Preferred Stock	(2)	(2)	Class A Common Stock	458,333		(2)		I	Held by Longitude Venture Partners II, L.P.		
Common Warrant	(3)	03/09/2022	Class A Common Stock		5,563	298.96		I	Held by Longitude Venture Partners II, L.P.		
Series A1 Warrant	(3)	07/24/2027	Series A1 Preferred Stock	2,5	500,000	0.01		I	By Longitude Venture Partners II, L.P.		

	(e.g., puts, c	alls,	warra	e Securities Beneficants, options, conve	ertible secu	urities)		
1. Title of Derivative Security (Instr.	Expiration D	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of S Underlying Derivative So (Instr. 4)	4. Conversion or Exercise	5. Ownership Form:		
	Date Exercisable	Expiration Date		Title	Amount or Number of Shares	Price of Derivative Security	Direct (D) or Indirect (I) (Instr. 5)	
Series B1 Warrant	(3)	01/17/2028		Series B1 Preferred Stock	645,160	0.01	I	
Name and Address of Reporting Per Longitude Capital Partners		<u> </u>						_
(Last) (First) 2740 SAND HILL ROAD, SECOND FLOOR	(Middle)							
(Street) MENLO PARK CA	94025							
(City) (State)	(Zip)							
Name and Address of Reporting Per Longitude Venture Partner	s II, L.P.							
(Last) (First) 2740 SAND HILL ROAD, SECOND FLOOR	(Middle)							
(Street) MENLO PARK CA	94025							
(City) (State)	(Zip)							
1. Name and Address of Reporting Per <u>ENRIGHT PATRICK G</u>	rson*							
(Last) (First) 2740 SAND HILL ROAD SECOND FLOOR	(Middle)							
(Street) MENLO PARK CA	94025							
(City) (State)	(Zip)							

6. Nature of Indirect Beneficial Ownership (Instr.

By Longitude Venture Partners II, L.P.

Explanation of Responses:

MENLO PARK CA

(Last)

(Street)

(City)

(State)

1. Name and Address of Reporting Person* Tammenoms Bakker Juliet

2740 SAND HILL ROAD

SECOND FLOOR

(Middle)

94025

(Zip)

^{1.} The securities are held directly by Longitude Venture Partners II, L.P. ("LVP II"). Longitude Capital Partners II, LLC, ("LCP II"), the general partner of LVP II, may be deemed to have voting and investment power with respect to the shares held by LVP II. Patrick G. Enright and Juliet Tammenoms Bakker are the managing members of LCP II and may be deemed to share voting and investment power over the shares held by LVP II. Each of LCP II, Mr. Enright and Ms. Tammenoms Bakker disclaim beneficial ownership of such

securities and this report shall not be deemed an admission that any one of them is the beneficial owner of such securities for purposes of Section 16 or for any other purpose, except to the extent of their respective pecuniary interest therein.

- 2. The Series A1 Preferred Stock, Series B1 Preferred Stock and Series C1 Preferred Stock (collectively, the "Preferred Stock") are convertible at any time, at the holder's election and have no expiration date. Each share of Preferred Stock shall be automatically converted into 0.20 shares of the Issuer's Class A Common Stock upon the closing of the Issuer's initial public offering.
- 3. Immediately exercisable.

<u>Longitude Capital Partners</u> <u>II, LLC, By: /s/ Patrick</u> 07/14/2021

Enright, managing

member

Longitude Venture Partners II, L.P., By: /s/

Patrick Enright, managing 07/14/2021

member of the general

partner

/s/ Patrick Enright 07/14/2021

/s/ Juliet Tammenoms

07/14/2021

Date

Bakker

** Signature of Reporting

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