

Form 5500 Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Annual Return/Report of Employee Benefit Plan This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code). ▶ Complete all entries in accordance with the instructions to the Form 5500.	OMB Nos. 1210-0110 1210-0089 2022 This Form is Open to Public Inspection
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Part I	Annual Report Identification Information
For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022	
A This return/report is for:	☐ a multiemployer plan ☐ a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.) ☒ a single-employer plan ☐ a DFE (specify) _____
B This return/report is:	☐ the first return/report ☐ the final return/report ☐ an amended return/report ☐ a short plan year return/report (less than 12 months)
C If the plan is a collectively-bargained plan, check here.	▶ ☐
D Check box if filing under:	☒ Form 5558 ☐ automatic extension ☐ the DFVC program ☐ special extension (enter description)
E If this is a retroactively adopted plan permitted by SECURE Act section 201, check here.	▶ ☐

Part II	Basic Plan Information —enter all requested information
1a Name of plan RAPID MICRO BIOSYSTEMS, INC. 401(K) PLAN	1b Three-digit plan number (PN) ▶ 001
	1c Effective date of plan 01/01/2010
2a Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) RAPID MICRO BIOSYSTEMS, INC. 1001 PAWTUCKET BLVD, WEST SUITE 280 LOWELL, MA 01854	2b Employer Identification Number (EIN) 20-8121647 2c Plan Sponsor's telephone number 978-349-3644 2d Business code (see instructions) 541990

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	10/13/2023	SHANNON CALLAHAN
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

Form 5500 (2022)
v. 220413

3a Plan administrator's name and address ☒ Same as Plan Sponsor		3b Administrator's EIN
		3c Administrator's telephone number
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report: a Sponsor's name c Plan Name		4b EIN 4d PN
5 Total number of participants at the beginning of the plan year		5 219
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines 6a(1) , 6a(2) , 6b , 6c , and 6d).		
a(1) Total number of active participants at the beginning of the plan year		6a(1) 173
a(2) Total number of active participants at the end of the plan year		6a(2) 148
b Retired or separated participants receiving benefits		6b 1
c Other retired or separated participants entitled to future benefits.....		6c 72
d Subtotal. Add lines 6a(2) , 6b , and 6c		6d 221
e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.		6e 0
f Total. Add lines 6d and 6e		6f 221
g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item).....		6g 215
h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested.....		6h 4
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item)		7
8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions: 2T 2S 2G 2J 2K 2E 3D 2F		
b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:		
9a Plan funding arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor		9b Plan benefit arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor
10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)		
a Pension Schedules (1) ☒ R (Retirement Plan Information) (2) ☐ MB (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary (3) ☐ SB (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary		b General Schedules (1) ☒ H (Financial Information) (2) ☐ I (Financial Information – Small Plan) (3) ☐ 0 A (Insurance Information) (4) ☒ C (Service Provider Information) (5) ☐ D (DFE/Participating Plan Information) (6) ☐ G (Financial Transaction Schedules)

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2022 Form M-1 annual report. If the plan was not required to file the 2022 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code _____

SCHEDULE C (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Service Provider Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110
		2022
		This Form is Open to Public Inspection.

For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022		
A Name of plan RAPID MICRO BIOSYSTEMS, INC. 401(K) PLAN	B Three-digit plan number (PN) ▶	001
C Plan sponsor's name as shown on line 2a of Form 5500 RAPID MICRO BIOSYSTEMS, INC.	D Employer Identification Number (EIN) 20-8121647	

Part I	Service Provider Information (see instructions)
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You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

- a Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions)..... ☒ Yes ☐ No
- b If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation
FIDELITY INVESTMENTS INSTITUTIONAL
04-2647786

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation
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2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

FIDELITY INVESTMENTS INSTITUTIONAL

04-2647786

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
37 60 64 65	RECORDKEEPER	3795	Yes ☒ No ☐	Yes ☒ No ☐	0	Yes ☒ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received \$1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
FIDELITY INVESTMENTS INSTITUTIONAL	60	0
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
VIC HIGH YIELD Y - FIS INVESTOR SE FAITH INVESTOR SERVICES, LLC 14785 PRESTON ROAD, SUITE 1000 DALLAS, TX 75254	0.10%	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
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(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)
(complete as many entries as needed)

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

SCHEDULE H (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Financial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500.	OMB No. 1210-0110 2022 This Form is Open to Public Inspection
For calendar plan year 2022 or fiscal plan year beginning <u>01/01/2022</u> and ending <u>12/31/2022</u>		
A Name of plan <u>RAPID MICRO BIOSYSTEMS, INC. 401(K) PLAN</u>		B Three-digit plan number (PN) <u>001</u>
C Plan sponsor's name as shown on line 2a of Form 5500 <u>RAPID MICRO BIOSYSTEMS, INC.</u>		D Employer Identification Number (EIN) <u>20-8121647</u>

Part I Asset and Liability Statement			
1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.			
Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash.....	1a	0	0
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions.....	1b(1)	0	0
(2) Participant contributions.....	1b(2)	0	0
(3) Other.....	1b(3)	0	0
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit).....	1c(1)	325888	406318
(2) U.S. Government securities	1c(2)	0	0
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)	0	0
(B) All other	1c(3)(B)	0	0
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)	0	0
(B) Common.....	1c(4)(B)	0	0
(5) Partnership/joint venture interests	1c(5)	0	0
(6) Real estate (other than employer real property)	1c(6)	0	0
(7) Loans (other than to participants).....	1c(7)	0	0
(8) Participant loans.....	1c(8)	87740	162437
(9) Value of interest in common/collective trusts.....	1c(9)	0	0
(10) Value of interest in pooled separate accounts	1c(10)	0	0
(11) Value of interest in master trust investment accounts.....	1c(11)	0	0
(12) Value of interest in 103-12 investment entities	1c(12)	0	0
(13) Value of interest in registered investment companies (e.g., mutual funds).....	1c(13)	9186573	10994432
(14) Value of funds held in insurance company general account (unallocated contracts).....	1c(14)	0	0
(15) Other	1c(15)	0	0

1d Employer-related investments:

		(a) Beginning of Year	(b) End of Year
(1) Employer securities	1d(1)	0	0
(2) Employer real property	1d(2)	0	0
e Buildings and other property used in plan operation	1e	0	0
f Total assets (add all amounts in lines 1a through 1e)	1f	9600201	11563187

Liabilities

g Benefit claims payable	1g	0	0
h Operating payables	1h	0	0
i Acquisition indebtedness	1i	0	0
j Other liabilities	1j	0	0
k Total liabilities (add all amounts in lines 1g through 1j)	1k	0	0

Net Assets

l Net assets (subtract line 1k from line 1f)	1l	9600201	11563187
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Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

Income**a Contributions:**

		(a) Amount	(b) Total
(1) Received or receivable in cash from: (A) Employers	2a(1)(A)	828761	
(B) Participants	2a(1)(B)	1914807	
(C) Others (including rollovers)	2a(1)(C)	2245861	
(2) Noncash contributions	2a(2)	0	
(3) Total contributions. Add lines 2a(1)(A) , (B) , (C) , and line 2a(2)	2a(3)		4989429

b Earnings on investments:**(1) Interest:**

(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)	5101	
(B) U.S. Government securities	2b(1)(B)	0	
(C) Corporate debt instruments	2b(1)(C)	0	
(D) Loans (other than to participants)	2b(1)(D)	0	
(E) Participant loans	2b(1)(E)	5943	
(F) Other	2b(1)(F)	0	
(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)		11044

(2) Dividends: (A) Preferred stock	2b(2)(A)	0	
(B) Common stock	2b(2)(B)	0	
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	259724	
(D) Total dividends. Add lines 2b(2)(A) , (B) , and (C)	2b(2)(D)		259724

(3) Rents	2b(3)		0
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(4) Net gain (loss) on sale of assets: (A) Aggregate proceeds	2b(4)(A)	0	
(B) Aggregate carrying amount (see instructions)	2b(4)(B)	0	
(C) Subtract line 2b(4)(B) from line 2b(4)(A) and enter result	2b(4)(C)		0

(5) Unrealized appreciation (depreciation) of assets: (A) Real estate	2b(5)(A)	0	
(B) Other	2b(5)(B)	0	
(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)		0

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		0
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		0
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		0
(9) Net investment gain (loss) from 103-12 investment entities.....	2b(9)		0
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		-2116165
c Other income	2c		0
d Total income. Add all income amounts in column (b) and enter total	2d		3144032
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	1175773	
(2) To insurance carriers for the provision of benefits	2e(2)	0	
(3) Other	2e(3)	0	
(4) Total benefit payments. Add lines 2e(1) through (3)	2e(4)		1175773
f Corrective distributions (see instructions)	2f		340
g Certain deemed distributions of participant loans (see instructions)	2g		0
h Interest expense	2h		0
i Administrative expenses: (1) Professional fees	2i(1)	0	
(2) Contract administrator fees	2i(2)	0	
(3) Investment advisory and management fees	2i(3)	1138	
(4) Other	2i(4)	3795	
(5) Total administrative expenses. Add lines 2i(1) through (4)	2i(5)		4933
j Total expenses. Add all expense amounts in column (b) and enter total	2j		1181046
Net Income and Reconciliation			
k Net income (loss). Subtract line 2j from line 2d	2k		1962986
l Transfers of assets:			
(1) To this plan	2l(1)		0
(2) From this plan	2l(2)		0

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) ☒ Unmodified (2) ☐ Qualified (3) ☐ Disclaimer (4) ☐ Adverse

b Check the appropriate box(es) to indicate whether the IQPA performed an ERISA section 103(a)(3)(C) audit. Check both boxes (1) and (2) if the audit was performed pursuant to both 29 CFR 2520.103-8 and 29 CFR 2520.103-12(d). Check box (3) if pursuant to neither.

(1) ☒ DOL Regulation 2520.103-8 (2) ☐ DOL Regulation 2520.103-12(d) (3) ☐ neither DOL Regulation 2520.103-8 nor DOL Regulation 2520.103-12(d).

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: **BAKER TILLY US, LLP**

(2) EIN: **39-0859910**

d The opinion of an independent qualified public accountant is **not attached** because:

(1) ☐ This form is filed for a CCT, PSA, or MTIA. (2) ☐ It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l.

During the plan year:

a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.)

	Yes	No	Amount
4a	☒	☐	103987

	Yes	No	Amount
b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)			
4b		X	
c Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)			
4c		X	
d Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)			
4d		X	
e Was this plan covered by a fidelity bond?	X		1000000
f Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?		X	
4f		X	
g Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?			
4g		X	
h Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?			
4h		X	
i Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	X		
4i	X		
j Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked and see instructions for format requirements.)			
4j		X	
k Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?			
4k		X	
l Has the plan failed to provide any benefit when due under the plan?			
4l		X	
m If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)			
4m		X	
n If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.			
4n		X	

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year? ☐ Yes ☒ No
If "Yes," enter the amount of any plan assets that reverted to the employer this year _____.

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

5b(1) Name of plan(s)	5b(2) EIN(s)	5b(3) PN(s)

5c Was the plan a defined benefit plan covered under the PBGC insurance program at any time during this plan year? (See ERISA section 4021 and instructions.) ☐ Yes ☐ No ☐ Not determined

If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year _____.

SCHEDULE R (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Retirement Plan Information This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500.	OMB No. 1210-0110 2022 This Form is Open to Public Inspection.
For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022		
A Name of plan RAPID MICRO BIOSYSTEMS, INC. 401(K) PLAN		B Three-digit plan number (PN) ► 001
C Plan sponsor's name as shown on line 2a of Form 5500 RAPID MICRO BIOSYSTEMS, INC.		D Employer Identification Number (EIN) 20-8121647
Part I	Distributions	
All references to distributions relate only to payments of benefits during the plan year.		
1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions.....		1
2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits): EIN(s): 04-6568107		
Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.		
3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year.....		3
Part II	Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)	
4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ☐ Yes ☐ No ☐ N/A If the plan is a defined benefit plan, go to line 8.		
5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. Date: Month _____ Day _____ Year _____ If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.		
6 a Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived).....		6a
b Enter the amount contributed by the employer to the plan for this plan year.....		6b
c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount).....		6c
If you completed line 6c, skip lines 8 and 9.		
7 Will the minimum funding amount reported on line 6c be met by the funding deadline? ☐ Yes ☐ No ☐ N/A		
8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ☐ Yes ☐ No ☐ N/A		
Part III	Amendments	
9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box..... ☐ Increase ☐ Decrease ☐ Both ☐ No		
Part IV	ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.	
10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan?.....		☐ Yes ☐ No
11 a Does the ESOP hold any preferred stock?.....		☐ Yes ☐ No
b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.).....		☐ Yes ☐ No
12 Does the ESOP hold any stock that is not readily tradable on an established securities market?.....		☐ Yes ☐ No
For Paperwork Reduction Act Notice, see the Instructions for Form 5500.		
Schedule R (Form 5500) 2022 v. 220413		

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that (1) contributed more than 5% of total contributions to the plan during the plan year or (2) was one of the top-ten highest contributors (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14	Enter the number of deferred vested and retired participants (inactive participants), as of the beginning of the plan year, whose contributing employer is no longer making contributions to the plan for:	
a	The current plan year. Check the box to indicate the counting method used to determine the number of inactive participants: ☐ last contributing employer ☐ alternative ☐ reasonable approximation (see instructions for required attachment).....	14a
b	The plan year immediately preceding the current plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14b
c	The second preceding plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14c
15	Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:	
a	The corresponding number for the plan year immediately preceding the current plan year.....	15a
b	The corresponding number for the second preceding plan year.....	15b
16	Information with respect to any employers who withdrew from the plan during the preceding plan year:	
a	Enter the number of employers who withdrew during the preceding plan year	16a
b	If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers.....	16b
17	If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐	

Part VI Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans

18 If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐

19 If the total number of participants is 1,000 or more, complete lines (a) through (c)

a Enter the percentage of plan assets held as:
 Stock: _____% Investment-Grade Debt: _____% High-Yield Debt: _____% Real Estate: _____% Other: _____%

b Provide the average duration of the combined investment-grade and high-yield debt:
☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more

c What duration measure was used to calculate line 19(b)?
☐ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify): _____

20 PBGC missed contribution reporting requirements. If this is a multiemployer plan or a single-employer plan that is not covered by PBGC, skip line 20.

a Is the amount of unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 greater than zero? ☐ Yes ☐ No

b If line 20a is "Yes," has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:

☐ Yes.

☐ No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date.

☐ No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date.

☐ No. Other. Provide explanation _____

Rapid Micro Biosystems, Inc. 401(k) Profit Sharing Plan and Trust

Financial Statements and
Supplementary Information

December 31, 2022 and 2021

	<u>Page</u>
Independent Auditors' Report	1
Financial Statements	
Statements of Net Assets Available for Plan Benefits	4
Statement of Changes in Net Assets Available for Plan Benefits	5
Notes to Financial Statements	6
Supplementary Information	
Schedule of Assets (Held at End of Year)	12
Schedule of Delinquent Participant Contributions	13



Independent Auditors' Report

To the Plan Administrator of the
Rapid Micro Biosystems, Inc. 401(k) Profit Sharing Plan and Trust

Scope and Nature of the ERISA Section 103(a)(3)(C) Audit

We have performed audits of the financial statements of Rapid Micro Biosystems, Inc. 401(k) Profit Sharing Plan and Trust (the Plan), an employee benefit plan subject to the Employee Retirement Income Security Act of 1974 (ERISA), as permitted by ERISA Section 103(a)(3)(C) (ERISA Section 103(a)(3)(C) audit). The financial statements comprise the statements of net assets available for plan benefits as of December 31, 2022 and 2021, and the related statement of changes in net assets available for plan benefits for the year ended December 31, 2022, and the related notes to the financial statements.

Management, having determined it is permissible in the circumstances, has elected to have the audits of the Plan's financial statements performed in accordance with ERISA Section 103(a)(3)(C) pursuant to 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. As permitted by ERISA Section 103(a)(3)(C), our audits need not extend to any statements or information related to assets held for investment of the plan (investment information) by a bank or similar institution or insurance carrier that is regulated, supervised, and subject to periodic examination by a state or federal agency, provided that the statements or information regarding assets so held are prepared and certified to by the bank or similar institution or insurance carrier in accordance with 29 CFR 2520.103-5 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA (qualified institution).

Management has obtained a certification from a qualified institution as of December 31, 2022 and 2021 and for the year ended December 31, 2022, stating that the certified investment information, as described in Note 9 to the financial statements, is complete and accurate.

Opinion

In our opinion, based on our audits and on the procedures performed as described in the *Auditors' Responsibilities for the Audit of the Financial Statements* section—

- the amounts and disclosures in the accompanying financial statements, other than those agreed to or derived from the certified investment information, are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.
- the information in the accompanying financial statements related to assets held by and certified to by a qualified institution agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Financial Statements* section of our report. We are required to be independent of the Plan and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our ERISA Section 103(a)(3)(C) audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error. Management's election of the ERISA Section 103(a)(3)(C) audit does not affect management's responsibility for the financial statements.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for one year after the date the financial statements are available to be issued.

Management is also responsible for maintaining a current plan instrument, including all plan amendments; administering the Plan; and determining that the Plan's transactions that are presented and disclosed in the financial statements are in conformity with the Plan's provisions, including maintaining sufficient records with respect to each of the participants, to determine the benefits due or which may become due to such participants.

Auditors' Responsibilities for the Audit of the Financial Statements

Except as described in the *Scope and Nature of the ERISA Section 103(a)(3)(C) Audit* section of our report, our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

Our audits did not extend to the certified investment information, except for obtaining and reading the certification, comparing the certified investment information with the related information presented and disclosed in the financial statements, and reading the disclosures relating to the certified investment information to assess whether they are in accordance with the presentation and disclosure requirements of accounting principles generally accepted in the United States of America.

Accordingly, the objective of an ERISA Section 103(a)(3)(C) audit is not to express an opinion about whether the financial statements as a whole are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Matter—Supplemental Schedules Required by ERISA

The supplemental schedules of assets (held at end of year) as of December 31, 2022 and delinquent participant contributions for the year ended December 31, 2022 are presented for purposes of additional analysis and are not a required part of the financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information included in the supplemental schedules, other than that agreed to or derived from the certified investment information, has been subjected to auditing procedures applied in the audits of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with GAAS. For information included in the supplemental schedules that agreed to or is derived from the certified investment information, we compared such information to the related certified investment information.

In forming our opinion on the supplemental schedules, we evaluated whether the supplemental schedules, other than the information agreed to or derived from the certified investment information, including their form and content, are presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA.

In our opinion—

- the form and content of the supplemental schedules, other than the information in the supplemental schedules that agreed to or is derived from the certified investment information, are presented, in all material respects, in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA.
- the information in the supplemental schedules related to assets held by and certified to by a qualified institution agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).

Baker Tilly US, LLP

Baker Tilly US, LLP
Tewksbury, Massachusetts
October 13, 2023

**Statements of Net Assets Available for Plan
Benefits**

**Rapid Micro Biosystems, Inc. 401(k)
Profit Sharing Plan and Trust**

December 31	2022		2021	
Assets				
Investments at Fair Value	\$	11,400,750	\$	9,512,461
Receivables:				
Participant Contributions Receivable		41,354		-
Plan Sponsor Contributions Receivable		84,648		38,020
Notes Receivable from Participants		162,437		87,740
Total Receivables		288,439		125,760
Net Assets Available for Plan Benefits	\$	11,689,189	\$	9,638,221

**Statement of Changes in Net Assets Available for
Plan Benefits**

**Rapid Micro Biosystems, Inc. 401(k)
Profit Sharing Plan and Trust**

Year Ended December 31

2022

Additions to Net Assets:

Investment Loss:

Net Depreciation in Fair Value of Investments \$ (2,116,103)

Interest and Dividends 264,762

Net Investment Loss (1,851,341)

Interest Income on Notes Receivable from Participants 5,943

Contributions:

Rollover Contributions 2,245,861

Participant Contributions 1,956,161

Plan Sponsor Contributions 875,389

Total Contributions 5,077,411

Total Additions 3,232,013

Deductions from Net Assets:

Benefits Paid to Participants 1,176,113

Administrative Expenses 4,932

Total Deductions 1,181,045

Net Increase in Net Assets Available for Plan Benefits 2,050,968

Net Assets Available for Plan Benefits, Beginning of Year 9,638,221

Net Assets Available for Plan Benefits, End of Year \$ 11,689,189

1. Description of the Plan:

The following description of Rapid Micro Biosystems, Inc. 401(k) Profit Sharing Plan and Trust (the Plan) provides only general information. Participants should refer to the Plan agreement for more complete information regarding the terms of the Plan.

General: The Plan is a defined contribution plan covering all eligible employees of Rapid Micro Biosystems, Inc. (the Plan Sponsor). The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA). The Plan Administrator is responsible for oversight of the Plan. The Rapid Micro Biosystems Investment Committee determines the appropriateness of the Plan's investment offerings and monitors investment performance.

Amendments: Effective January 1, 2022, the Plan was amended to (i) update the vesting schedule, for all Participants hired on or after January 1, 2022, from 100% immediate vesting of all Plan Sponsor matching contributions to a two-year graduated vesting schedule for all Plan Sponsor matching contributions and (ii) add a separate vesting schedule for all Participants hired prior to January 1, 2022 whereby Participants are immediately vested 100% in all Plan Sponsor matching contributions. The description of the Plan that follows describes the Plan as amended effective January 1, 2022.

Eligibility: All employees of the Plan Sponsor, except for employees covered by a collective bargaining agreement, leased employees, nonresident aliens, contractors, residents of Puerto Rico, interns, and co-ops, become eligible for participation in the Plan on their date of hire and upon attaining age 21. Eligible employees enrolled in the Plan are referred to as "Participants" in the Plan.

Contributions: The Plan provides for Participant pretax contributions. Participants may contribute up to 75% of their pretax compensation, as defined by the Plan, subject to the Internal Revenue Code (IRC) limitations. Rollover contributions from other qualified plans are allowed, with the approval of the Plan Administrator. The Plan includes a qualified Roth contribution program, whereby Participants may irrevocably elect to treat all or a portion of compensation that would otherwise be eligible to defer as pretax contributions as designated Roth contributions as defined in Section 402A(c)(1) of the IRC. The Plan has an automatic enrollment feature, whereby active Participants who do not revoke their elective contributions will contribute a minimum of 3% of eligible compensation. Participants direct the investment of their contributions into various investment options offered by the Plan.

The Plan provides that Participants who are projected to be age 50 or older by the end of the calendar year and who are making deferral contributions to the Plan may also make a catch-up contribution subject to IRC limitations.

The Plan Sponsor may, at its discretion, make matching contributions to the Plan in any Plan year in an amount determined by the Board of Directors of the Plan Sponsor. During the year ended December 31, 2022, the Plan Sponsor made discretionary matching contributions equal to 100% of Participant contributions up to the first 2% of their eligible compensation and 50% of the next 4% of eligible compensation. For the year ended December 31, 2022, discretionary matching contributions amounted to \$875,389, which is net of forfeitures of \$22,860.

Participant Accounts: Each Participant's account is credited with the Participant's contributions and allocations of (a) the Plan Sponsor's contributions, (b) Plan earnings or losses, and (c) charged with an allocation of administrative expenses, if any. Allocations are based on Participant earnings or account balances, as defined. The benefit to which a Participant is entitled is the benefit that can be provided from the Participant's vested account.

Vesting: Participants hired prior to January 1, 2022 are immediately vested 100% in their contributions and all Plan Sponsor contributions, plus actual earnings thereon.

1. Description of the Plan (Continued):

Participants hired on or after January 1, 2022 are immediately vested 100% in their contributions plus actual earnings thereon. Participants are 100% vested in the Plan Sponsor contributions and the actual earnings thereon after completion of two years of credited service. Participant vesting in the Plan based upon years of service is as follows:

Years of Service from <u>Date of Hire</u>	Vested Percentage of Matching <u>Contributions</u>
1	50%
2	100%

Participants are 100% vested upon the occurrence of death, permanent disability, or normal retirement age, as defined.

Notes Receivable from Participants: Participants may borrow from their Plan accounts in amounts attributable to the Participant's vested balance for a maximum term of five years. If the loan is for the purchase of a principal residence, the term of the loan may be extended. A Participant may borrow the lesser of 50% of their eligible balance or \$50,000. The minimum loan amount is \$1,000 and only one loan can be outstanding at any time. The loan balance is secured by the Participant's account and bears fixed interest at rates that are commensurate with local prevailing rates as determined monthly by the Plan Administrator, which range from 5.25% to 9.00% as of December 31, 2022. Principal and interest is paid ratably through payroll deductions.

Benefits and Withdrawals: The vested benefits are paid to the Participants or their beneficiaries upon the Participants' retirement, death, disability or termination of employment with the Plan Sponsor. In the event of the above, the Participants or their beneficiaries will receive a lump sum distribution if the account balance has a value of less than or equal to \$1,000. Terminated Participants' vested account balances of greater than \$1,000 and up to \$5,000 may be automatically distributed to an Individual Retirement Account (IRA). Participants whose account balances exceed \$5,000 may elect to receive a lump sum or partial withdrawal distribution, or may leave their vested balance in the Plan.

Hardship withdrawals are permitted by the Plan as defined in the IRC. Participants may also withdraw their vested account balance upon attaining age 59 ½.

Forfeited Accounts: Forfeited amounts related to Plan Sponsor contributions are used to reduce future Plan Sponsor contributions or to pay Plan expenses. Forfeited amounts not used to reduce future Plan Sponsor contributions or to pay Plan expenses are reallocated to Participant accounts as additional Plan Sponsor contributions. During the year ended December 31, 2022, the Plan Sponsor used forfeitures in the amount of \$22,860 to reduce its contributions. During the year ended December 31, 2022, the Plan Sponsor used forfeitures in the amount of \$2,276 to pay Plan expenses. As of December 31, 2022 and 2021, the Plan had forfeitures available to offset future Plan Sponsor contributions or to pay Plan expenses in the amount of \$3,040 and \$1,654, respectively.

Recapture Account: The Plan holds assets in an unallocated account which receives revenue sharing payments related to certain investments held by the Plan as a result of a revenue sharing agreement with Fidelity Management Trust Company. During the year ended December 31, 2022, payments to the account totaled \$892, which are included as a reduction of net administrative expenses in the statement of changes in net assets available for plan benefits. Funds in the account are used to pay qualified plan expenses including investment management fees. During the year ended December 31, 2022, the Plan Sponsor did not use the recapture account to pay Plan expenses. During the year ended December 31, 2022, \$727 was reallocated to participant accounts. As of December 31, 2022 and 2021, unallocated assets amounted to \$172 and \$6, respectively, and are included in Fidelity Government Money Market Fund K6.

2. Significant Accounting Policies:

Basis of Accounting: The financial statements of the Plan are prepared under the accrual method of accounting.

Investment Valuation and Income Recognition: Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Plan Administrator determines the Plan's valuation policies utilizing information provided by the investment advisers and trustee. See Note 3 for further discussion of fair value measurements.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net depreciation in fair value of investments includes the Plan's gains and losses on investments bought and sold as well as held during the year.

Notes Receivable from Participants: Notes receivable from Participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Interest income is recorded on the accrual basis. Related fees are recorded as administrative expenses and are expensed when they are incurred. No allowance for credit losses has been recorded as of December 31, 2022 and 2021. If a Participant ceases to make loan repayments and the Plan Administrator deems the Participant loan to be in default, the note receivable balance is reduced and a benefit payment is recorded.

Payment of Benefits: Benefits are recorded when paid.

Expenses: Certain expenses of maintaining the Plan are paid directly by the Plan Sponsor and are excluded from these financial statements. Fees related to the administration of notes receivable from Participants are charged directly to the Participant's account and are included in administrative expenses. Investment-related expenses are included in net depreciation in fair value of investments.

Use of Estimates: The preparation of the financial statements in accordance with accounting principles generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosures of contingent assets and liabilities. Actual results could differ from those estimates.

Subsequent Events: The Plan Administrator has evaluated subsequent events through October 13, 2023, the date the financial statements were available to be issued.

Recent Pronouncements: The Secure 2.0 Act of 2022 was signed into law on December 29, 2022. This legislation includes a vast array of provisional changes to retirement plans, becoming effective in 2023 and beyond. Plan management is evaluating the impact of the adoption and implementation of this legislation on the Plan.

3. Fair Value Measurements:

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described as follows:

Level 1 - Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

3. Fair Value Measurements (Continued):

Level 2 - Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability; and
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 - Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of observable inputs and minimize the use of unobservable inputs.

Mutual funds are valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are registered with the Securities and Exchange Commission. These funds are required to publish their daily net asset value (NAV) and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded. There have been no changes in the methodologies used for the years ended December 31, 2022 and 2021.

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following table sets forth, by level within the fair value hierarchy, the Plan's fair value measurements as of December 31, 2022 and 2021:

		Assets at Fair Value as of December 31, 2022			
		Total	Level 1	Level 2	Level 3
Investments:					
Mutual Funds		\$ 11,400,750	\$ 11,400,750	\$ -	\$ -
Total Investments		\$ 11,400,750	\$ 11,400,750	\$ -	\$ -
		Assets at Fair Value as of December 31, 2021			
		Total	Level 1	Level 2	Level 3
Investments:					
Mutual Funds		\$ 9,512,461	\$ 9,512,461	\$ -	\$ -
Total Investments		\$ 9,512,461	\$ 9,512,461	\$ -	\$ -

4. Party-in-Interest Transactions:

Certain Plan investments are managed by Fidelity Management Trust Company, trustee of the Plan, and therefore, these transactions qualify as party-in-interest transactions. Fees incurred by the Plan for the investment management services are included in net depreciation in fair value of investments, as they are paid through revenue sharing, rather than direct payment, in the accompanying statement of changes in net assets available for plan benefits for the year ended December 31, 2022. During the year ended December 31, 2022, the Plan made direct payments to Fidelity Investments Institutional and Strategic Advisors, Inc., the recordkeeper and advisor, respectively, in the aggregate amount of \$4,932, which were not covered by revenue sharing. The Plan Sponsor pays directly any other fees related to the Plan's operations.

5. Untimely Remittance:

During the year ended December 31, 2020, the Plan Sponsor did not remit certain Participant contributions to the Plan in a timely manner, as defined by ERISA. The contributions are considered non-exempt party-in-interest transactions, which may result in an imposition of a 15% excise tax on the amount of the transactions. The Plan Sponsor has computed the lost earnings on untimely contributions and determined they are immaterial to the Plan's financial statements.

6. Tax Status:

The Plan has adopted the nonstandardized preapproved profit sharing plan of FMR LLC. The plan sponsor of the nonstandardized preapproved profit sharing plan received a favorable opinion letter dated June 30, 2020 in which the Internal Revenue Service stated that the form of the nonstandardized preapproved profit sharing plan was in compliance with the applicable requirements of the IRC. The nonstandardized preapproved profit sharing plan has been amended since receiving the opinion letter; however, the Plan Administrator believes that the Plan and the related trust are currently being operated in compliance with the applicable provisions of the IRC, and that the related trust is therefore tax-exempt.

GAAP requires plan management to evaluate tax positions taken by the Plan and to recognize a tax liability (or asset) if the Plan Sponsor has taken an uncertain position that more likely than not would not be sustained upon examination by the Internal Revenue Service. The Plan Administrator believes it has no uncertain tax positions as of December 31, 2022 and 2021 and for the year ended December 31, 2022.

7. Plan Termination:

Although it has not expressed any intent to do so, the Plan Sponsor has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of Plan termination, Participants would become 100% vested in the Plan Sponsor contributions.

8. Risks and Uncertainties:

The Participants invest in various investment securities. Investment securities are exposed to various risks, such as interest rate, market, and credit risks. Market risks include global events which could impact the value of investment securities, such as a pandemic or international conflict. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and such changes could materially affect Participants' account balances and the amounts reported in the accompanying statements of net assets available for plan benefits.

As of December 31, 2022 and 2021, the Plan had investments of \$4,818,240 and \$3,068,313, respectively, that were concentrated in three and two funds, respectively.

9. Information Certified by the Trustee:

Certain information related to investments and notes receivable from participants disclosed in the accompanying financial statements and ERISA-required supplemental schedules of assets (held at end of year) as of December 31, 2022 and delinquent participant contributions for the year ended December 31, 2022, including investments and notes receivable from participants held at December 31, 2022 and 2021, and net depreciation in fair value of investments, interest and dividends, and interest income on notes receivable from Participants for the year ended December 31, 2022, was obtained by management and agreed to or derived from information certified as complete and accurate by Fidelity Management Trust Company, trustee of the Plan.

10. Subsequent Events:

Plan Amendments: Effective January 1, 2023, the Plan was amended to (i) add an automatic annual increase to the automatic enrollment provision of the Plan of 1% of eligible compensation up to a maximum of 10%, which is effective on April 1 of each Plan year; and (ii) change the Plan Sponsor matching contributions from discretionary to Safe Harbor whereby the Plan Sponsor matches 100% of Participant contributions up to 2% of their eligible compensation and 50% of the next 4% of eligible compensation.

11. Reconciliation of Financial Statements to Form 5500:

The following is a reconciliation of net assets available for plan benefits per the financial statements to the Form 5500 as of December 31, 2022 and 2021:

	2022	2021
Net Assets Available for Plan Benefits, Per Financial Statements	\$ 11,689,189	\$ 9,638,221
Participant Contributions Receivable	(41,354)	-
Plan Sponsor Contributions Receivable	(84,648)	(38,020)
Net Assets Available for Plan Benefits, Per Form 5500	<u>\$ 11,563,187</u>	<u>\$ 9,600,201</u>

The following is a reconciliation of the net increase in net assets available for plan benefits per the financial statements to Form 5500 for the year ended December 31, 2022:

Net Increase in Net Assets Available for Plan Benefits, Per Financial Statements	\$ 2,050,968
Less: 2022 Participant Contributions Receivable	(41,354)
Less: 2022 Plan Sponsor Contributions Receivable	(84,648)
Add: 2021 Plan Sponsor Contributions Receivable	<u>38,020</u>
Net Increase in Net Assets Available for Plan Benefits, Per Form 5500	<u>\$ 1,962,986</u>

**Schedule H, Line 4i Schedule of Assets
(Held at End of Year)**

**Rapid Micro Biosystems, Inc. 401(k)
Profit Sharing Plan and Trust
EIN#20-8121647/ Plan #001**

As of December 31, 2022

(a)	(b) Identity of Issue, Borrower, Lessor or Similar Party	(c) Description of Investment, Including Maturity Date, Rate of Interest, Collateral, Par or Maturity Value	(d) Cost	(e) Current Value
		<u>Mutual Funds:</u>		
*	Fidelity	Fidelity 500 Index Fund	**	\$ 2,055,784
*	Fidelity	Fidelity Freedom Index 2035 Fund Institutional Premium Class	**	1,510,609
*	Fidelity	Fidelity Freedom Index 2050 Fund Institutional Premium Class	**	1,251,847
	Vanguard	Vanguard Balanced Index Fund Admiral	**	775,819
*	Fidelity	Fidelity Freedom Index 2030 Fund Institutional Premium Class	**	580,242
*	Fidelity	Fidelity Small Cap Index Fund	**	529,577
*	Fidelity	Fidelity Freedom Index 2045 Fund Institutional Premium Class	**	517,704
	JP Morgan	JPMorgan Large Cap Growth Fund Class R6	**	460,424
*	Fidelity	Fidelity Government Money Market Fund	**	406,146
*	Fidelity	Fidelity Freedom Index 2055 Fund Institutional Premium Class	**	393,300
*	Fidelity	Fidelity Freedom Index 2040 Fund Institutional Premium Class	**	373,405
*	Fidelity	Fidelity Mid Cap Index Fund	**	348,053
*	Fidelity	Fidelity International Index Fund	**	294,664
*	Fidelity	Fidelity Freedom Index 2020 Fund Institutional Premium Class	**	250,721
*	Fidelity	Fidelity Freedom Index 2025 Fund Institutional Premium Class	**	249,172
	Lord Abbett	Lord Abbett Total Return Fund Class R6	**	236,022
	MFS	MFS Value Fund Class R6	**	224,598
*	Fidelity	Fidelity Freedom Index 2060 Fund Institutional Premium Class	**	188,881
*	Fidelity	Fidelity Inflation-Protected Bond Index Fund	**	173,365
	American Funds	American Funds New World Fund Class R-6	**	127,214
	Invesco	Invesco Corporate Bond Fund Class R6	**	123,205
	American Funds	American Funds EuroPacific Growth Fund Class R-6	**	104,912
	PIMCO	PIMCO International Bond Fund (U.S. Dollar-Hedged)	**	95,216
	Victory	Victory High Yield Y	**	47,024
*	Fidelity	Fidelity Freedom Index 2065 Fund Institutional Premium Class	**	44,672
*	Fidelity	Fidelity Real Estate Index Fund	**	21,550
*	Fidelity	Fidelity Freedom Index 2015 Fund Institutional Premium Class	**	16,452
*	Fidelity	Fidelity Government Money Market Fund K6	**	172
		Total Mutual Funds		<u>11,400,750</u>
*	Participant Loans	Notes Receivable from Participants, with interest rates ranging from 5.25% to 9.00%, maturing through May 2052	-0-	<u>162,437</u>
		Total		<u>\$ 11,563,187</u>

(*) Represents a party-in-interest to the Plan.

(**) Cost information may be omitted for the participant-directed transactions under an individual account plan.

**Schedule H, Line 4a Schedule of Delinquent
Participant Contributions**

**Rapid Micro Biosystems, Inc. 401(k)
Profit Sharing Plan and Trust
EIN#20-8121647/ Plan #001**

Delinquent participant contributions are summarized as follows:

Participant Contributions Transferred Late to Plan		Total that Constitutes Nonexempt Prohibited Transactions			
For the Year Ended December 31	Check here if late participant loan repayments are included:	Contributions Not Corrected	Contributions Corrected Outside VFCP	Contributions Pending Correction in VFCP	Total Fully Corrected Under VFCP and PTE
2020	☒	\$ 103,987	\$ -	\$ -	\$ -