Via EDGAR Transmission

United States Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E.

Washington, D.C. 20549-6010 Attention: David Gessert

> Laura Crotty Jenn Do Daniel Gordon

Re: Rapid Micro Biosystems, Inc.

Registration Statement on Form S-1

Filed July 12, 2021

Registration No. 333-257431

Ladies and Gentleman:

In accordance with Rule 461 of Regulation C of the General Rules and Regulations under the Securities Act of 1933, as amended, we hereby request the acceleration of the effective date of the above-referenced Registration Statement so that it will become effective on July 14, 2021, at 4:00 p.m., Eastern Time, or as soon thereafter as practicable, or at such later time as Rapid Micro Biosystems, Inc. (the "Company") or its counsel may request via telephone call to the staff. Please contact Wesley Holmes of Latham & Watkins LLP, counsel to the Company, at (617) 948-6027, or in his absence, Jennifer Yoon at (617) 880-4540, to provide notice of effectiveness, or if you have any other questions or concerns regarding this matter.

Sincerely yours,

Rapid Micro Biosystems, Inc.

By: <u>/s/ Robert Spignesi</u>

Robert Spignesi President and Chief Executive Officer

cc: Wesley Holmes, Esq. Jennifer A. Yoon, Esq.