

May 24, 2021

VIA EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Attention: Alan Campbell
Jeffrey Gabor
Ibolya Ignat
Lynn Dicker

**Re: Singular Genomics Systems, Inc.
Registration Statement on Form S-1
File No. 333-255912**

Request for Acceleration of Effective Date

Requested Date: Wednesday, May 26, 2021
Requested Time: 4:00 P.M. Eastern Time

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, Singular Genomics Systems, Inc. (the "**Company**") hereby requests that the above-referenced Registration Statement on Form S-1 (File No. 333-255912) (the "**Registration Statement**") be declared effective at the "Requested Date" and "Requested Time" set forth above or at such later time as the Company or its counsel may orally request via telephone call to the staff of the Division of Corporation Finance of the Securities and Exchange Commission. Once the Registration Statement has been declared effective, please orally confirm that event with our counsel, Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP, by calling Ryan Gunderson at (858) 436-8046.

[Signature page follows]

Sincerely,

Singular Genomics Systems, Inc.

By: /s/ Andrew Spaventa

Andrew Spaventa
Chief Executive Officer
Principal Executive Officer

cc: Dalen Meeter, Singular Genomics Systems, Inc.
Charles S. Kim, Cooley LLP
Sean M. Clayton, Cooley LLP
Kristin E. VanderPas, Cooley LLP
Denny Won, Cooley LLP