

May 12, 2021

Via EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549-3720
Attention: Alan Campbell
Jeffrey Gabor

**Re: Singular Genomics Systems, Inc.
CIK No. 0001850906
Amendment No. 1 to Draft Registration Statement on Form S-1
Submitted April 26, 2021
Registration Statement on Form S-1
Filed May 7, 2021
Registration Statement No: 333-255912**

Dear Mr. Campbell:

Singular Genomics Systems, Inc. (the "Company"), has filed via EDGAR its Amendment No. 1 to the Registration Statement on Form S-1 (the "Registration Statement").

On behalf of the Company, this letter responds to the comment set forth in the letter to the Company, dated May 10, 2021, from the staff of the Securities and Exchange Commission (the "Staff"). For your convenience, we have repeated and numbered the comment from the May 10, 2021 letter in bold and italicized print, and the Company's response is provided below the comment.

Amendment No. 1 to Draft Registration Statement on Form S-1

Intellectual Property

Columbia University License Agreement .page 114

1. ***We note your response to prior comment 13 and revised disclosure. Please revise to disclose whether the G4 Integrated Solution and the PX Integrated Solution are classified as Patent Products or Other Products. To the extent that the G4 Integrated Solution and the PX Integrated Solution are covered by the license agreement, please revise the Prospectus Summary to discuss the license agreement and any associated risks.***

In addition, provisions providing the contracting party the right to terminate the agreement for failure to meet milestone events are material to investors, please expand your disclosures to describe the milestone events and the dates by which you are required to achieve them.

RESPONSE TO COMMENT 1:

The Company acknowledges the Staff's comment and has revised pages 11, 12, 48, 49, 81, 82, 117, 118, 119 and F-25 of the Registration Statement to respond to the Staff's comments by revising the Prospectus Summary and expanding disclosure of the Columbia University License Agreement in the Registration Statement.

Securities and Exchange Commission

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Please do not hesitate to contact me at (858) 436-8046 if you have any questions or would like additional information regarding this matter.

Very truly yours,

GUNDERSON DETTMER STOUGH
VILLENEUVE FRANKLIN & HACHIGIAN, LLP

By: /s/ Ryan J. Gunderson

cc: Dalen Meeter