UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON D.C. 20549

WASHINGTON, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

Under The Securities Act of 1933

SINGULAR GENOMICS SYSTEMS, INC.

(Exact name of Registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 81-2948451 (IRS Employer Identification No.)

10931 N. Torrey Pines Road Suite #100 La Jolla, CA 92037 (858) 333-7830 (Address of Principal Executive Offices)

Singular Genomics Systems, Inc. 2021 Equity Incentive Plan Singular Genomics Systems, Inc. 2021 Employee Stock Purchase Plan (Full title of Plan)

> Andrew Spaventa Chief Executive Officer and Chairperson of the Board Singular Genomics Systems, Inc. 10931 N. Torrey Pines Road Suite #100 La Jolla, CA 92037 (Name and address of agent for service)

(858) 333-7830 (Telephone number, including area code, of agent for service)

Copies to:

Ryan J. Gunderson Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP 3570 Carmel Mountain Road, Suite 200 San Diego, CA 92130 (858) 436-8000 Dalen Meeter Senior Vice President, Finance Singular Genomics Systems, Inc. 10931 N. Torrey Pines Road Suite #100 La Jolla, CA 92037 (858) 333-7830

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer \Box

Non-accelerated filer

Accelerated filer□Smaller reporting company□Emerging growth company⊠

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

EXPLANATORY NOTE

Pursuant to General Instruction E to Form S-8 under the 1933 Act, this Registration Statement is filed by Singular Genomics Systems, Inc. (the "Registrant") for the purpose of registering additional shares of common stock, par value \$0.0001 per share (the "Common Stock") under the 2021 Equity Incentive Plan and 2021 Employee Stock Purchase Plan pursuant to the provisions of such plans that provide for automatic annual increases in the number of shares reserved for issuance thereunder. This Registration Statement hereby incorporates by reference the contents of the Registrant's registration statement on Form S-8 filed with the Commission on May 27, 2021 (File No. 333-256568) to the extent not superseded hereby.

PART II

Information Required in the Registration Statement

Item 3. Incorporation of Documents by Reference

Singular Genomics Systems, Inc., or the Registrant, hereby incorporates by reference into this Registration Statement the following documents:

- (a) the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2021 filed with the SEC on March 14, 2022;
- (b) the Registrant's Current Reports on Form 8-K filed with the SEC on January 6, 2022, January 20, 2022 and January 26, 2022;
- (c) the description of the Registrant's common stock contained in the Registrant's Registration Statement on Form 8-A (File No. 001-40443), filed with the SEC on May 25, 2021, including any amendments or reports filed for the purpose of updating such description;
- (d) the information specifically incorporated by reference into the Registrant's Annual Report on Form 10-K for the year ended December 31, 2021 from the Registrant's definitive proxy statement relating to the 2022 annual meeting of stockholders; and
- (e) all other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the registrant document referred to in (a) above.

All other reports and documents filed by the Registrant pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, subsequent to the filing of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which de-registers all securities then remaining unsold shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing of such documents. The Registrant is not, however, incorporating any documents or information that the Registrant is deemed to furnish and not file in accordance with SEC rules. Any statement contained in a document incorporated or deemed incorporated by reference in this Registration Statement to the extent that a statement contained in any subsequently filed document that also is deemed incorporated by reference in this Registration Statement modifies or supersedes that statement.

Item 4. Description of Securities

Not applicable.

Item 5. Interests of Named Experts and Counsel

Not applicable.

Item 6. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers under certain circumstances and subject to certain limitations. The

terms of Section 145 of the Delaware General Corporation Law are sufficiently broad to permit indemnification under certain circumstances for liabilities, including reimbursement of expenses incurred, arising under the Securities Act.

As permitted by the Delaware General Corporation Law, the Registrant's amended and restated certificate of incorporation and amended and restated bylaws contain provisions relating to the limitation of liability and indemnification of directors and officers. The amended and restated certificate of incorporation provides that the Registrant's directors will not be personally liable to the Registrant or its stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability:

- for any breach of the director's duty of loyalty to the Registrant or its stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- in respect of unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- for any transaction from which the director derives any improper personal benefit.

The Registrant's amended and restated certificate of incorporation also provides that if Delaware law is amended after the approval by the Registrant's stockholders of the certificate of incorporation to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of the directors will be eliminated or limited to the fullest extent permitted by Delaware law.

The Registrant's amended and restated bylaws provide that the Registrant will indemnify its directors and officers to the fullest extent permitted by Delaware law, as it now exists or may in the future be amended, against all expenses and liabilities reasonably incurred in connection with their service for or on the Registrant's behalf. The Registrant's amended and restated bylaws provide that the Registrant shall advance the expenses incurred by a director or officer in advance of the final disposition of an action or proceeding, and permit the Registrant to secure insurance on behalf of any director, officer, employee, or other enterprise agent for any liability arising out of his or her action in that capacity, whether or not Delaware law would otherwise permit indemnification.

The Registrant entered into indemnification agreements with each of its directors and executive officers and certain other key employees. The form of agreement provides that the Registrant will indemnify each of its directors, executive officers and such other key employees against any and all expenses incurred by that director, executive officer, or other key employee because of his or her status as one of the Registrant's directors, executive officers, or other key employees, to the fullest extent permitted by Delaware law, the Registrant's restated certificate of incorporation and its amended and restated bylaws. In addition, the form agreement provides that, to the fullest extent permitted by Delaware law, the Registrant will advance all expenses incurred by its directors, executive officers and other key employees in connection with a legal proceeding.

The Registrant currently carries and intends to continue to carry liability insurance for its directors and officers.

Item 7. Exemption from Registration Claimed

Not applicable.

Item 8. Exhibits

The following exhibits are incorporated herein by reference.

EXHIBIT INDEX

Exhibit		Incorporated by Reference				
Number	Description	Form	File No.	<u>Exhibit</u>	Filing Date	Filed <u>Herewith</u>
4.1	Specimen common stock certificate of the Registrant.	S-1/A	333-255912	4.1	5/24/2021	
4.2	Amended and Restated Certificate of Incorporation of Registrant.	8-K	001-40443	3.1	6/1/2021	
4.3	Amended and Restated Bylaws of Registrant.	8-K	001-40443	3.2	6/1/2021	
4.4	Certificate of Designation of Preferences, Rights and Limitations of the Series <u>A Preferred Stock, par value \$0.0001 per share, of the Company</u>	8-K	001-40443	3.1	1/26/2022	
5.1	<u>Opinion and Consent of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP.</u>					Х
23.1	Consent of Independent Registered Public Accounting Firm.					Х
23.2	Consent of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP (contained in Exhibit 5.1).					Х
24.1	Power of Attorney (contained in the signature page hereto).					Х
99.1	2021 Equity Incentive Plan and forms of agreements thereunder.	S-1/A	333-255912	10.3	05/24/2021	
99.2	2021 Employee Stock Purchase Plan.	S-1/A	333-255912	10.4	05/24/2021	
107	Calculation of Filing Fee Tables					Х

Item 9. Undertakings

- A. The undersigned Registrant hereby undertakes:
- (1) to file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act,

(ii) to reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent posteffective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement, and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement; <u>provided</u>, <u>however</u>, that clauses A(1)(i) and A(1)(ii) above shall not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement;

- (2) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; and
- (3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the Registrant's offering.

B. The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

C. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions or otherwise, the Registrant has been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of La Jolla, State of California on this 14th day of March, 2022.

SINGULAR GENOMICS SYSTEMS, INC.

By: /s/ Dalen Meeter

Dalen Meeter Senior Vice President, Finance

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS that each person whose signature appears below constitutes and appoints Andrew Spaventa, Daralyn Durie and Dalen Meeter and each of them, his or her true and lawful attorneys-in-fact and agents, each with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments, including post-effective amendments, to this registration statement, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorney-in-fact and agents or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, each of the undersigned has executed this Power of Attorney as of the date indicated.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date		
/s/ Andrew Spaventa Andrew Spaventa	Chief Executive Officer and Chair of the Board of Directors (Principal Executive Officer)	March 14, 2022		
/s/ Dalen Meeter Dalen Meeter	Senior Vice President, Finance (Principal Financial Officer and Principal Accounting Officer)	March 14, 2022		
/s/ David Barker David Barker	Director	March 14, 2022		
/s/ Kim Kamdar Kim Kamdar	Director	March 14, 2022		
/s/ Elaine Mardis Elaine Mardis	Director	March 14, 2022		
/s/ Michael Pellini Michael Pellini	Lead Independent Director	March 14, 2022		
/s/ Jason Ryan Jason Ryan	Director	March 14, 2022		

Exhibit 5.1



March 14, 2022

Singular Genomics Systems, Inc. 10931 N. Torrey Pines Road Suite #100 La Jolla, CA 92037

Ladies and Gentlemen:

We refer to the registration statement on Form S-8 (the "*Registration Statement*") to be filed by Singular Genomics Systems, Inc., a Delaware corporation (the "*Company*"), with the Securities and Exchange Commission (the "*Commission*") in connection with the registration under the Securities Act of 1933, as amended (the "*Act*"), of an aggregate of 4,346,324 shares of the Company's common stock, \$0.0001 par value per share (the "*Shares*"), that are subject to issuance by the Company (i) upon the exercise or settlement of awards granted or to be granted under the Company's 2021 Equity Incentive Plan and (ii) the exercise of purchase rights to acquire shares of common stock granted or to be granted under the Company's 2021 Employee Stock Purchase Plan. The Company's 2021 Equity Incentive Plan and 2021 Employee Stock Purchase Plan are collectively referred to in this letter as the "*Plans*".

In connection with this opinion, we have reviewed the actions proposed to be taken by you in connection with the issuance and sale of the Shares to be issued under the Plans. We have also examined and relied upon the Registration Statement and the originals or copies certified to our satisfaction of such other documents, records, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. With your consent, we have relied upon certificates and other assurances of officers of the Company as to factual matters without having independently verified such factual matters. We have assumed the genuineness and authenticity of all documents submitted to us as originals, and the conformity to originals of all documents submitted to us as copies thereof and the due execution and delivery of all documents where due execution and delivery are a prerequisite to the effectiveness thereof.

This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement, other than as expressly stated herein with respect to the issue of the Shares. Our opinion is limited to the matters stated herein and no opinion is implied or may be inferred beyond the matters expressly stated. Our opinion herein is expressed solely with respect to the federal laws of the United States and the General Corporation Law of the State of Delaware (the "*DGCL*"). Our opinion is based on these laws as in effect on the date hereof, and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and which may alter, affect or modify the opinion expressed herein. We are not rendering any opinion as to compliance with any federal or state antifraud law, rule or regulation relating to securities, or to the sale or issuance thereof.

GUNDERSON DETTMER STOUGH VILLENEUVE FRANKLIN & HACHIGIAN, LLP 3570 CARMEL MOUNTAIN ROAD, SUITE 200, SAN DIEGO, CA 92130 / PHONE: 858.436.8000 / FAX: 877.881.9192 Based upon and subject to the foregoing, we advise you that, in our opinion, when the Shares have been issued and sold by the Company pursuant to the applicable provisions of the Plans and pursuant to the agreements which accompany the Plans, and in accordance with the Registration Statement, such Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Sincerely,

/s/ Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP

GUNDERSON DETTMER STOUGH VILLENEUVE FRANKLIN & HACHIGIAN, LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Singular Genomics Systems, Inc. 2021 Equity Incentive Plan and the Singular Genomics Systems, Inc. 2021 Employee Stock Purchase Plan of our report dated March 14, 2022, with respect to the financial statements of Singular Genomics Systems, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2021, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

San Diego, California March 14, 2022

Calculation of Filing Fee Tables

<u>Form S-8</u> (Form Type)

Singular Genomics Systems Inc. (Exact name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule(4)	Amount Registered(1)	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee(5)
Equity	Common Stock, par	Rule 457(h)					
	value \$0.0001 per share	Rule 457(c)	3,621,937(2)	\$7.420(4)	\$26,874,772.54	0.0000927	\$2,491.29
Equity	Common Stock, par	Rule 457(h)					
	value \$0.0001 per share	Rule 457(c)	724,387(3)	\$6.307(4)	\$4,568,708.81	0.0000927	\$423.52
Total Offering Amounts					\$31,443,481.35		\$2,914.81
Total Fee Offsets						—	
Net Fee Due							\$2,914.81

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended, or the Securities Act, this Registration Statement shall also cover any additional shares of Registrant's Common Stock that become issuable under the Registrant's 2021 Equity Incentive Plan (the "2021 EIP") and the Registrant's 2021 Employee Stock Purchase Plan (the "2021 ESPP"), as a result of any stock dividend, stock split, recapitalization, or other similar transaction effected without the receipt of consideration that results in an increase to the number of outstanding shares of Registrant's Common Stock (the "Common Stock"). Common Stock issuable under the 2021 EIP and 2021 ESPP were previously registered on a Registration Statement on May 27, 2021 (File No. 333-256568).
- (2) Represents 3,621,937 shares of Common Stock that were automatically added to the shares reserved for issuance under the 2021 EIP on January 3, 2022 pursuant to an "evergreen" provision contained in the 2021 EIP. The number of shares of Common Stock available for issuance under the 2021 Equity Incentive Plan is subject to an automatic annual increase on the first business day of each fiscal year of the Company through 2031 equal to the lowest of (a) 5% of the total number of shares of Common Stock outstanding as of the last business day of the prior fiscal year, or (b) a number of shares of Common Stock determined by the Registrant's Board of Directors.
- (3) Represents 724,387 shares of Common Stock that were automatically added to the shares reserved for issuance under the 2021 ESPP on January 3, 2022 pursuant to an "evergreen" provision contained in the 2021 ESPP. The number of shares of Common Stock available for issuance under the 2021 ESPP is subject to an automatic annual increase on the first business day of each fiscal year of the Company through 2041 equal to the lowest of (a) 1,460,000 shares of Common Stock (subject to proportionate adjustment in the event of a stock split, stock dividend, reverse stock split, etc.), (b) 1% of the total number of shares of Common Stock outstanding as of the last business day of the prior fiscal year, or (c) a number of shares of Common Stock determined by the Registrant's Board of Directors.
- (4) This estimate is made pursuant to Rule 457(h)(1) and Rule 457(c) of the Securities Act solely for purposes of calculating the registration fee. The price per share and aggregate offering price for the shares added to the 2021 EIP are based upon the average of the high and low prices of the Common Stock on March 8, 2022, as reported on the Nasdaq Global Select Market, which date is within five business days prior to the filing of this Registration Statement. The price per share and aggregate offering price of the shares added to the 2021 ESPP are based upon the average of the high and low prices of the Common Stock on March 8, 2022, as reported on the Nasdaq Global Select Market, which date is within five business days prior to the filing of this Registration Statement. The price per share and aggregate offering price of the shares added to the 2021 ESPP are based upon the average of the high and low prices of the Common Stock on March 8, 2022, as reported on the Nasdaq Global Select Market, which date is within five business days prior to the filing of this Registration Statement, multiplied by 85%, which is the percentage of the price per share applicable to purchasers under the 2021 ESPP.

(5) The Registrant does not have any fee offsets.