FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| Washington. | D.C. 20549 | 9 |  |
|-------------|------------|---|--|

| OMB APPROVAL             |           |  |  |  |  |  |  |
|--------------------------|-----------|--|--|--|--|--|--|
| OMB Number:              | 3235-0287 |  |  |  |  |  |  |
| Estimated average burden |           |  |  |  |  |  |  |
|                          | 0.5       |  |  |  |  |  |  |

| _  | Check this box if no longer subject to Section 16 |  |  |  |  |  |  |  |  |  |
|----|---|--|--|--|--|--|--|--|--|--|
| -1 | Form 4 or Form 5 obligations may continue. See    |  |  |  |  |  |  |  |  |  |
| _  | Instruction 1(h)                                  |  |  |  |  |  |  |  |  |  |

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934
or Section 30(h) of the Investment Company Act of 1940

| Name and Address of Reporting Person*     TWOMEY CHRISTOPHER J   |   |  |   |   | 2. Issuer Name <b>and</b> Ticker or Trading Symbol Bionano Genomics, Inc. [ BNGO ] |   |                     |  |            |   |                                  |   | S. Relationship of Reporting Person(s) to Issuer (Check all applicable)     X Director 10% Owner   |  |                           |  |  |
|--|---|--|---|---|--|---|---------------------|--|------------|---|----------------------------------|---|--|--|---------------------------|--|--|
| (Last)   | (First)   | (Mi  | iddle)  |   | 3. Date of Earliest Transaction (Month/Day/Year) 06/14/2023                        |   |                     |  |            |   |                                  |   | cer (give title below)   |  | ecify below)              |  |  |
| C/O BIONANO GENOMICS, INC. 9540 TOWNE CENTRE DRIVE, SUITE 100  |   |  |   |   | 4. If Amendment, Date of Original Filed (Month/Day/Year)                           |   |                     |  |            |   |                                  | 6. Individ  | Individual or Joint/Group Filing (Check Applicable Line)     X Form filed by One Reporting Person     Form filed by More than One Reporting Person |  |                           |  |  |
| (Street) SAN DIEGO   | CA  | 92   | 121   | _ F   | Rule 10b5-1(c) Transaction Indication  |   |                     |  |            |   |                                  |   |  |  |                           |  |  |
| (City)   | (State)   | (Zi  | p)  | L   | Rule 10b5-1(c). See Instruction 10.  |   |                     |  |            |   |                                  |   |  |  |                           |  |  |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned   |   |  |   |   |  |   |                     |  |            |   |                                  |   |  |  |                           |  |  |
| D  |   |  | Date  | Transaction 2A. Deemed Execution Date, onth/Day/Year) |  | 3. Transaction Code (Instr. 8) 4. Securities Acquired (A) or Dispos (D) (Instr. 3, 4 and 5) |                     |  | ·          | 5. Amount of Sec<br>Beneficially Own<br>Following Repor           | ed Dir                           | Ownership Form:<br>rect (D) or<br>direct (I) (Instr. 4) | Indirect   |  |                           |  |  |
|  |   |  |   |   | (Month/Day/Year)   |   |                     | Code V   | Amount     | t   | (A) or (D)                       | I   | ransaction(s) (Instr. 3<br>and 4)  |  | ,                         | Ownership<br>(Instr. 4)  |  |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |   |  |   |   |  |   |                     |  |            |   |                                  |   |  |  |                           |  |  |
| 1. Title of Derivative<br>Security (Instr. 3)  | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | 4. Transaction<br>Code (Instr. 8)                     |  |   |                     | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) |            | 7. Title and Amount of Se<br>Underlying Derivative Se<br>3 and 4) |                                  |   | 8. Price of<br>Derivative<br>Security<br>(Instr. 5)  | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following | Ownership<br>Form: Direct | 11. Nature of<br>Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |
|  | Coomity   |  |   | Code  | V (A) (D)  | (D)   | Date<br>Exercisable | Expiration<br>Date   | Title      |   | Amount or<br>Number of<br>Shares |   | Reported<br>Transaction<br>(Instr. 4)  | ' '  |                           |  |  |
| Stock Option (Right to Buy)  | \$0.7458  | 06/14/2023                                 |   | A   |  | 250,000   |                     | (1)  | 06/14/2033 | Comr  | non Stock                        | 250,000   | \$0  | 250,000  | D                         |  |  |

## Explanation of Responses:

1. The shares will vest in equal monthly installments over the 12 months following the date of grant, provided that the shares will, in any case, be fully vested on the date of the Company's next annual stockholder meeting, subject to the optionholder's Continuous Service (as defined in the Company's 2018 equity incentive plan) through each such vesting date and will vest in full upon a Change of Control (as defined in the Company's 2018 equity incentive plan).

## Remarks:

/s/ R. Erik Holmlin, Attorney-in-Fact 06/16/2023

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

 $^{\star}$  If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

POWER OF ATTORNEY

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Know all, by these presents, that the undersigned hereby constitutes and appoints R. Erik Holmlin and Jonathan V. Dixon, signing individually,
(1) execute for and on behalf of the undersigned, an officer, director or holder of 10% of more of a registered class of securities of Bionano
(2) do and perform any and all acts for and on behalf of the undersigned that may be necessary or desirable to complete and execute such Form
(3) take any other action of any nature whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of
The undersigned hereby grants to such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requi
This Power of Attorney shall remain in full force and effect until the earliest to occur of (a) the undersigned is no longer required to file
IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 16th day of June, 2023.
/S/ CHRISTOPHER J. TWOMEY
NAME: CHRISTOPHER J. TWOMEY