FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF **SECURITIES**

| OMB APPROVAL | | | | | | |
|--------------------------|----------------------|--|--|--|--|--|
| OMB Number: | MB Number: 3235-0104 | | | | | |
| Estimated average burden | | | | | | |
| hours per response | 0.5 | | | | | |

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

| Gupta Vinita D | 2. Date of Event Requiring Statement (Month/Day/Year) 04/25/2017 3. Issuer Name and Ticker or Trading Symbol INTREXON CORP [XON] | | | | | | | | | |
|--|---|--------------------|---|----------------------------|---|---|---|--|--|--|
| (Last) (First) (Middle) 20374 SENECA MEADOWS PARKWAY | 0 1,23,201 | | Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner | | (Mc | 5. If Amendment, Date of Original Filed (Month/Day/Year) | | | | |
| (Street) | | | Officer (give title below) | Other (spe | cify 6. II | Individual or Joint/Group Filing (Check Applicable Line) Y Form filed by One Reporting Person | | | | |
| GERMANTOWN MD 20876 | | | | | 4 | _ | y More than One | | | |
| (City) (State) (Zip) | | | | | | | | | | |
| Table I - Non-Derivative Securities Beneficially Owned | | | | | | | | | | |
| 1. Title of Security (Instr. 4) | | | . Amount of Securities eneficially Owned (Instr. 4) | | | 4. Nature of Indirect Beneficial Ownership (Instr. 5) | | | | |
| Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | |
| 1. Title of Derivative Security (Instr. 4) | 2. Date Exercisable and Expiration Date (Month/Day/Year) | | 3. Title and Amount of Securi Underlying Derivative Securi | | 4. Conversion or Exercise Price of | Form: | 6. Nature of Indirect Beneficial Ownership (Instr. 5) | | | |
| | | Expiration Date | n Title | Amount or Sec Number of | | Direct (D) or Indirect (I) (Instr. 5) | | | | |

Explanation of Responses:

Remarks:

No securities are beneficially owned.

/s/ Vinita D. Gupta, by Donald 04/27/2017 P. Lehr, Power of Attorney

** Signature of Reporting Person

Date

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

- * If the form is filed by more than one reporting person, see Instruction 5 (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.

SECTION 16 POWER OF ATTORNEY

I, Vinita Gupta, do hereby constitute and appoint Donald P. Lehr and Rick L. Sterling, my true and lawful attorneys-in-fact, either of whom acting singly is hereby authorized, for me and in my name and on my behalf as a director, officer and/or shareholder of INTREXON CORPORATION to (i) prepare, execute in my name and on my behalf, and submit to the U.S. Securities and Exchange Commission (the SEC) a Form ID, including any necessary amendments thereto, and any other documents necessary or appropriate to obtain codes and passwords enabling me to make electronic filings with the SEC of reports required by Section 16(a) of the Securities Exchange Act of 1934 or any rule or regulation of the SEC in respect thereof; and (ii) prepare, execute and file any and all forms, instruments or documents, including any necessary amendments thereto, as such attorneys or attorney deems necessary or advisable to enable me to comply with Section 16 of the Securities Exchange Act of 1934 or any rule or regulation of the SEC in respect thereof (collectively, Section 16). I do hereby ratify and confirm all acts my said attorney shall do or cause to be done by virtue hereof. I acknowledge that the foregoing attorneys-in-fact, serving in such capacity at my request, are not assuming, nor is INTREXON CORPORATION assuming, any of my responsibilities to comply with Section 16.

This power of attorney shall remain in full force and effect until it is revoked by the undersigned in a signed writing delivered to each such attorney-in-fact or the undersigned is no longer required to comply with Section 16, whichever occurs first.

WITNESS the execution hereof this 24th day of April, 2017.

/s/ Vinita Gupta Vinita Gupta