

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

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

<p>1. Name and Address of Reporting Person *</p> <p><u>KIRK RANDAL J</u></p> <hr/> <p>(Last) (First) (Middle)</p> <p>C/O THIRD SECURITY, LLC 1881 GROVE AVENUE</p> <hr/> <p>(Street)</p> <p>RADFORD VA 24141</p> <hr/> <p>(City) (State) (Zip)</p>	<p>2. Issuer Name and Ticker or Trading Symbol</p> <p><u>INTREXON CORP [XON]</u></p> <hr/> <p>3. Date of Earliest Transaction (Month/Day/Year)</p> <p>08/30/2019</p> <hr/> <p>4. If Amendment, Date of Original Filed (Month/Day/Year)</p>	<p>5. Relationship of Reporting Person(s) to Issuer (Check all applicable)</p> <p><input checked="" type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner</p> <p><input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below)</p> <p style="text-align: center;">Chief Executive Officer</p> <hr/> <p>6. Individual or Joint/Group Filing (Check Applicable Line)</p> <p><input checked="" type="checkbox"/> Form filed by One Reporting Person</p> <p><input type="checkbox"/> Form filed by More than One Reporting Person</p>
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Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	08/30/2019		A		30,088 ⁽¹⁾	A	\$6.65 ⁽¹⁾	18,352,764	I	by R.J. Kirk DOT ⁽³⁾
Common Stock	08/30/2019		A		107,265 ⁽²⁾	A	\$7.46 ⁽²⁾	2,632,209	I	by Third Security ⁽³⁾
Common Stock								207,014	I	by JPK 2008 ⁽³⁾
Common Stock								1,234,073	I	by JPK 2009 ⁽³⁾
Common Stock								1,066,124	I	by JPK 2012 ⁽³⁾
Common Stock								157,413	I	by Kellie L. Banks LTT ⁽³⁾
Common Stock								205,763	I	by MGK 2008 ⁽³⁾
Common Stock								1,377,412	I	by MGK 2009 ⁽³⁾
Common Stock								1,165,897	I	by MGK 2011 ⁽³⁾
Common Stock								975,084	I	by Sr. Staff 2015 ⁽³⁾
Common Stock								975,084	I	by Staff 2015 ⁽³⁾
Common Stock								176,628	I	by ZSK 2008 ⁽³⁾
Common Stock								122,118	I	by ZSK 2009 ⁽³⁾
Common Stock								14,140,139	I	by Kapital Joe ⁽³⁾
Common Stock								8,325,000	I	by TSCP V ⁽⁴⁾

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock								311,287	I	by Staff 2001 ⁽⁴⁾
Common Stock								1,403	I	by Lotus ⁽⁴⁾
Common Stock								118,266	I	by Senior Staff 2006 ⁽⁴⁾
Common Stock								59,133	I	by Staff 2006 ⁽⁴⁾
Common Stock								19,711	I	by Incentive 2006 ⁽⁴⁾
Common Stock								5,483,957	I	by Mascara Kaboom ⁽⁴⁾
Common Stock								58,800	I	by Sr. Staff ⁽⁴⁾
Common Stock								213,805	I	by ADC 2010 ⁽⁴⁾
Common Stock								1,356,648	I	by Senior Staff 2008 ⁽⁴⁾
Common Stock								1,356,648	I	by Staff 2010 ⁽⁴⁾
Common Stock								1,142,758	I	by Incentive 2010 ⁽⁴⁾
Common Stock								13,340,645	I	by NRM VI Holdings ⁽⁴⁾
Common Stock								243,001	I	by NRM VII Holdings ⁽⁴⁾

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V		(A)	(D)					

Explanation of Responses:

- In accordance with the Restricted Stock Unit Agreement dated April 1, 2019 between Intrexon Corporation ("Intrexon") and Randal J. Kirk, each month Mr. Kirk will receive that number of shares of Intrexon common stock, rounded down to the nearest whole share, whose fair market value equals \$200,000. The number of shares of Intrexon common stock are to become vested and payable based upon the volume-weighted average of the price of the common stock of Intrexon (as calculated by Bloomberg) over the 30-day period ending on the last calendar day of the month. Mr. Kirk has designated the R.J. Kirk Declaration of Trust ("R.J. Kirk DOT") to receive these shares.
- In accordance with the Services Agreement between Intrexon and Third Security, LLC ("Third Security") dated November 1, 2015, as amended by the Fourth Amendment to the Services Agreement dated April 18, 2019 (the "Fourth Amendment"), for services provided by Third Security to Intrexon, Intrexon shall pay to Third Security, on a monthly basis, such number of shares of common stock of Intrexon, rounded down to the nearest whole number, equal to a value of \$800,000. The number of shares issuable to Third Security shall be calculated by dividing \$800,000 by the volume-weighted average of the price of Intrexon's common stock (as calculated by Bloomberg) over the 30-day period ending on the 15th day of the calendar month during which the applicable services are provided.
- Randal J. Kirk controls each of R.J. Kirk DOT, Third Security, JPK 2008, LLC ("JPK 2008"), JPK 2009, LLC ("JPK 2009"), JPK 2012, LLC ("JPK 2012"), Kellie L. Banks (2009) Long Term Trust ("Kellie L. Banks LTT"), MGK 2008, LLC ("MGK 2008"), MGK 2009, LLC ("MGK 2009"), MGK 2011, LLC ("MGK 2011"), Third Security Senior Staff 2015 LLC ("Sr. Staff 2015"), Third Security Staff 2015 LLC ("Staff 2015"), ZSK 2008, LLC ("ZSK 2008"), ZSK 2009, LLC ("ZSK 2009"), and Kapital Joe, LLC ("Kapital Joe"). Shares held by these entities may be deemed to be beneficially owned (as defined under Rule 13d-3 promulgated under the Securities Exchange Act of 1934, as amended) by Mr. Kirk. Mr. Kirk disclaims beneficial ownership of such shares, except to the extent of any pecuniary interest therein.

4. Randal J. Kirk controls each of Third Security Capital Partners V, LLC ("TSCP V"), Third Security Staff 2001 LLC ("Staff 2001"), Lotus Capital (2000) Company Inc. ("Lotus"), Third Security Senior Staff 2006 LLC ("Senior Staff 2006"), and Third Security Staff 2006 LLC ("Staff 2006"), Third Security Incentive 2006 LLC ("Incentive 2006"), Mascara Kaboom, LLC ("Mascara Kaboom"), Third Security Senior Staff LLC ("Sr. Staff"), ADC 2010, LLC ("ADC 2010"), Third Security Senior Staff 2008 LLC ("Senior Staff 2008"), Third Security Staff 2010 LLC ("Staff 2010"), Third Security Incentive 2010 LLC ("Incentive 2010"), NRM VI Holdings I, LLC ("NRM VI Holdings") and NRM VII Holdings I, LLC ("NRM VII Holdings"). Shares held by these entities may be deemed to be beneficially owned (as defined under Rule 13d-3 promulgated under the Securities Exchange Act of 1934, as amended) by Mr. Kirk. Mr. Kirk disclaims beneficial ownership of such shares, except to the extent of any pecuniary interest therein.

/s/ Randal J. Kirk

09/03/2019

** 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 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.