

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

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

OMB APPROVAL	
OMB Number:	3235-0287
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1. Name and Address of Reporting Person* <u>Reed Thomas D.</u> (Last) (First) (Middle) 20374 SENECA MEADOWS PARKWAY (Street) GERMANTOWN MD 20876 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>INTREXON CORP [XON]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Chief Science Officer</u>
	3. Date of Earliest Transaction (Month/Day/Year) 03/20/2014	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

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			

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)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Option to Purchase Common Stock (Right to Buy)	\$30.72	03/20/2014		A		350,000		(1)	03/20/2024	Common Stock	350,000	\$0	350,000	D	
Option to Purchase Common Stock (Right to Buy)	\$1.34							(2)	02/07/2016	Common Stock	61,943		61,943	D	
Option to Purchase Common Stock (Right to Buy)	\$2.74							(2)	11/15/2017	Common Stock	28,571		28,571	D	
Option to Purchase Common Stock (Right to Buy)	\$2.74							(2)	02/20/2018	Common Stock	8,571		8,571	D	
Option to Purchase Common Stock (Right to Buy)	\$3.29							(2)	03/20/2019	Common Stock	2,857		2,857	D	

Explanation of Responses:

- 25% of the options vest on each of March 20, 2015, 2016, 2017 and 2018.
- These options are immediately exercisable.

Remarks:

/s/ Thomas D. Reed, by Donald P. Lehr, Power of Attorney 03/24/2014

** 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.