

July 24, 2013

**By EDGAR Submission and  
Overnight Delivery**

U.S. Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, D.C. 20549-0404

Attention: Mr. Jeffrey P. Riedler  
Assistant Director

**RE: Intrexon Corporation  
Registration Statement on Form S-1  
Submitted May 10, 2013, as amended  
CIK No. 0001356090**

Dear Mr. Riedler:

As counsel to Intrexon Corporation (the "Company"), I am transmitting herewith supplemental information regarding the Company's proposed directed share program to be described in an amendment to the Company's Registration Statement on Form S-1 (as amended, the "Registration Statement"). In addition, the Company wishes to inform the Staff (the "Staff") of the Securities and Exchange Commission that Randal J. Kirk, the Company's Chairman, President and Chief Executive Officer, on behalf of himself and certain of his affiliates, has indicated an interest in purchasing an aggregate of up to approximately \$30 million in shares of the Company's common stock in the offering at the initial public offering price.

The Company has determined to create a directed share program for certain of the shares of common stock offered under the Registration Statement. Under the program, the underwriters will reserve up to 7% of the shares offered for sale at the initial public offering price to the Company's directors, officers, employees and certain other persons who are otherwise associated with the Company, excluding Randal J. Kirk and his affiliates. The number of shares available for sale to the general public will be reduced by the number of directed shares purchased by participants in the program. The shares included in the directed share program will be subject to lock-up agreements. I refer to the directed share program as the DSP.

Directed share materials will be provided to prospective participants in the DSP. However, the Company advises the Staff that no directed share materials will be sent to prospective participants until a preliminary prospectus containing a price range is available. As soon as the preliminary prospectus containing a price range is available, the underwriters will send a notice to prospective participants. The notice will include: (a) an explanatory letter accompanied by the preliminary prospectus, (b) an indication of interest form letter, (c) a client

ATLANTA BEIJING CHICAGO HONG KONG NEW YORK NORFOLK ORANGE COUNTY PORTLAND  
RALEIGH RICHMOND SAN DIEGO SHANGHAI TYSONS CORNER VIRGINIA BEACH WASHINGTON, DC

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questionnaire, (d) a directed share account information form, and (e) a list of answers to commonly asked questions (collectively, the "Confidential Information"). The written materials will contain only the statements required or permitted to be included therein by the provisions of Rule 134 and the Staff. The forms of these materials are supplementally enclosed herewith. Pursuant to Rule 418 of the Securities Act, I request, on behalf of the Company, that at the conclusion of the Commission's review of the Confidential Information, all copies of the Confidential Information be returned to the undersigned in the enclosed prepaid addressed envelope.

In addition, as discussed above, Randal J. Kirk, the Company's Chairman, President and Chief Executive Officer, on behalf of himself and certain of his affiliates, has indicated an interest in purchasing an aggregate of up to approximately \$30 million in shares of the Company's common stock in the offering at the initial public offering price (the "IPP").

The Company intends to file an amendment to the Registration Statement which describes the DSP and the IPP. I enclose the accompanying changed pages marked to indicate changes from the Registration Statement. The enclosed pages include changes to the Cover page (IPP), Prospectus summary — The offering (DSP and IPP), Risk factors (IPP), Dilution (IPP), Certain relationships and related person transactions — Participation in this offering (IPP), Principal shareholders (DSP and IPP) and Underwriting (DSP and IPP).

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If you have any questions or comments regarding the foregoing, or if there is any additional information that we might provide to assist the Staff, please contact the undersigned at (804) 697-1239 or John Owen Gwathmey at (804) 697-1225.

Sincerely,  
/s/ David I. Meyers  
David I. Meyers

Cc: Mr. Donald Abbott, SEC Staff  
Mr. Johnny Gharib, SEC Staff  
Mr. John Krug, SEC Staff  
Mr. Franklin Wyman, SEC Staff  
Mr. Randal J. Kirk, Intrexon Corporation  
Mr. Donald P. Lehr, Intrexon Corporation  
Mr. John Owen Gwathmey, Troutman Sanders LLP