

INTREXON CORPORATION
20374 Seneca Meadows Parkway
Germantown, Maryland 20876
Telephone: (301) 556-9900

April 19, 2018

VIA EDGAR

Mr. Joel Parker
Senior Assistant Chief Accountant
Office of Beverages, Apparel and Mining
Division of Corporation Finance
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Intrexon Corporation
Form 10-K for the Fiscal Year Ended December 31, 2017
Filed March 1, 2018
File Number 001-36042

Dear Mr. Parker:

We have reviewed the comments of the staff (the "Staff") of the Securities and Exchange Commission, as set forth in its letter dated April 9, 2018, with respect to the above-referenced filing. Enclosed herewith are the Staff's comments followed by responses on behalf of Intrexon Corporation (the "Company").

Form 10-K for the Fiscal Year Ended December 31, 2017

Financial Statements

Consolidated Balance Sheets, page F-5

Comment:

1. Please disclose your deferred revenue from related parties on the face of the balance sheet. Refer to Rule 4-08(k) of Regulation S-X.

Response:

The Company confirms that in future quarterly and annual filings, starting with the Company's Form 10-Q for the period ended March 31, 2018 (the "March 31, 2018 10-Q"), it will disclose deferred revenue from related parties on the face of the balance sheet,

consistent with the Staff's comment. Below, using the balance sheet at December 31, 2017 and 2016 disclosed in the Company's Form 10-K for the fiscal year ended December 31, 2017 (the "2017 10-K"), is an illustrative example of the disclosure the Company will include in future filings (new language is underlined>:

Intrexon Corporation and Subsidiaries
Consolidated Balance Sheets
December 31, 2017 and 2016

(Amounts in thousands, except share data)

	2017	2016
Liabilities and Total Equity		
Current liabilities		
Accounts payable	\$ 8,701	\$ 8,478
Accrued compensation and benefits	6,474	6,540
Other accrued liabilities	21,080	15,776
Deferred revenue, <u>including \$29,155 and \$33,802 from related parties as of December 31, 2017 and 2016, respectively.</u>	42,870	53,364
Lines of credit	233	820
Current portion of long term debt	502	386
Deferred consideration	—	8,801
Related party payables	313	440
Total current liabilities	<u>80,173</u>	<u>94,605</u>
Long term debt, net of current portion	7,535	7,562
Deferred revenue, net of current portion, <u>including \$157,628 and \$214,301 from related parties as of December 31, 2017 and 2016, respectively.</u>	193,527	256,778
Deferred tax liabilities, net	15,620	17,007
Other long term liabilities	3,451	3,868
Total liabilities	<u>300,306</u>	<u>379,820</u>
Commitments and contingencies (Note 17)		
Total equity		
Common stock, no par value, 200,000,000 shares authorized as of December 31, 2017 and 2016; and 122,087,040 shares and 118,688,770 shares issued and outstanding as of December 31, 2017 and 2016, respectively	—	—
Additional paid-in capital	1,397,005	1,325,780
Accumulated deficit	(847,820)	(729,341)
Accumulated other comprehensive loss	(15,554)	(36,202)
Total Intrexon shareholders' equity	533,631	560,237
Noncontrolling interests	12,914	9,011
Total equity	<u>546,545</u>	<u>569,248</u>
Total liabilities and total equity	<u>\$ 846,851</u>	<u>\$ 949,068</u>

Notes to Consolidated Financial Statements

5. Collaboration and Licensing Revenue, page F-32

Comment:

2. Please disclose the estimated remaining performance period for your significant collaboration agreements.

Response:

The Company confirms that in future quarterly and annual filings, starting with the March 31, 2018 Form 10-Q, it will disclose the estimated remaining performance period for its significant collaboration agreements, consistent with the Staff's comment. Below, using disclosure from the 2017 10-K, is an illustrative example of the disclosure the Company will include in future filings (new language is underlined):

The following table summarizes the remaining balance of deferred revenue associated with upfront and milestone payments for each significant collaboration and licensing agreement as of December 31, 2017 and 2016, including the estimated, average remaining performance period as of December 31, 2017.

	<u>Average Remaining Performance Period (Years)</u>	<u>December 31,</u>	
		<u>2017</u>	<u>2016</u>
ZIOPHARM Oncology, Inc.	6.0	\$ 90,496	\$138,809
Oragenics, Inc.	6.4	6,719	7,766
Fibrocell Science, Inc.	6.9	16,607	19,026
Genopaver, LLC	6.3	1,704	1,977
Intrexon Energy Partners, LLC	6.3	15,625	18,125
Persea Bio, LLC	7.0	3,500	4,000
Ares Trading S.A.	6.4	40,789	47,178
Intrexon Energy Partners II, LLC	6.9	13,833	15,833
Intrexon T1D Partners, LLC	7.2	8,435	8,653
Harvest start-up entities (1)	7.4	18,400	20,208
Other	4.3	14,423	16,292
Total		<u>\$230,531</u>	<u>\$297,867</u>

- (1) As of December 31, 2017 and December 31, 2016, the balance of deferred revenue for collaborations with Harvest start-up entities includes Thrive Agrobiotics, Inc.; Exotech Bio, Inc.; Relieve Genetics, Inc.; AD Skincare, Inc.; Genten Therapeutics, Inc.; and CRS Bio, Inc.

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Mr. Joel Parker
April 19, 2018
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If you have any questions concerning this letter or if you would like any additional information, please do not hesitate to call me at (301) 556-9900.

Very truly yours,

/s/ Rick L. Sterling

Rick L. Sterling
Chief Financial Officer

cc: Donald P. Lehr, Intrexon Corporation
Matthew Keffer, PricewaterhouseCoopers LLP
William I. Intner, Hogan Lovells US LLP