

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

March 11, 2011

Charles J. Link, Jr.
Chief Executive Officer
NewLink Genetics Corporation
2503 South Loop Drive
Ames, IA 50010

Re: NewLink Genetics Corporation

Amendment No. 1 to Registration Statement on Form S-1

Filed February 28, 2011 File No. 333-171300

Dear Dr. Link:

We have reviewed your response and amended registration statement each filed February 28, 2011 and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

<u>Prospectus Summary</u> <u>Our Risks, page 3</u>

1. We have reviewed your response to prior comment 9. Please disclose the amount of your accumulated deficit in the penultimate bullet-point.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Policies and Significant Judgments and Estimates
Stock-Based Compensation
Common Stock Fair Value
Fair Value Estimates, page 61

- 2. Refer to your response to prior comment 20 and please address the following:
 - Revise your disclosure to define the approval date and the GAAP measurement date included in your tabular disclosure, and disclose the differences between the two columns.

- Disclose why the GAAP grant measurement date has not yet occurred for the options granted in November and December 2010, as described in footnote two to your tabular disclosure.
- Tell us and disclose why it is appropriate to use the common stock fair value as of a date subsequent to the GAAP transaction date. In your response, specifically address the following:
 - Utilizing the common stock fair value as of 6/30/10 instead of as of 9/30/10 to measure your grant on October 8, 2010; and
 - Utilizing the common stock fair value as of 9/30/10 instead of 12/31/10 to measure your grant on January 19, 2011.
- 3. Refer to your response to prior comment 21 and address the last bullet of that comment as follows:
 - Disclose the anticipated effects on results of operations for equity issuances made subsequent to the date of your financial statements through the date of your filing, including the options referenced in footnote two to your tabular disclosure on page 61.

Loan Agreements

March 2005 Iowa Department of Economic Development Loan, page 66

4. On page 66, you disclose that the original project completion date for the project was March 18, 2010 and was initially extended to March 18, 2011 by amendment to the agreement approved by the IDED. Based on your progress on the project you requested and received a second extension of the project completion date to March 18, 2012. Please clarify if this extension amended the agreement. If so, please file a copy of the amendment as an exhibit to this registration statement.

Business

License Agreements, page 105

5. We have reviewed your response to prior comments 33, 36, 37 and 38. For each agreement, please expand your disclosure to disclose the payments made to date and the duration. For example, if the term of the agreement is the date of the last to expire patent licensed under the respective agreement, please disclose the date of the current last to expire patent. We believe that the duration and the aggregate payments made to date are material terms of the agreements and should be disclosed in your filing.

Executive and Director Compensation Compensation Discussion and Analysis, page 127

6. On pages 136 and 137, you disclose that BPS paid various bonuses to Drs. Link and Vahanian. Please expand your Compensation Discussion and Analysis to provide the information required by Item 402(b) of Regulation S-K for these payments.

Elements of our Executive Compensation Program, page 129

7. You disclose that in establishing the 2009 and 2010 base salaries of your executive officers, your Compensation Committee and Board of Directors took into account a number of factors, including the executive's seniority, position, functional role and level of responsibility and individual performance during the previous year. Based on the table provided on page 130, it appears that base salary increases in 2010 ranged from 48% to 5%. Please disclose for each executive officer the percentage which their base salary was increased and, for each executive officer, a specific discussion of the factors considered by the Committee when it determined to increase such officer's salary by the specified percentage.

Index to Financial Statements
Notes to Consolidated Financial Statements
2. Significant Accounting Policies
(i) Pro Forma Stockholders' Equity, page F-12

- 8. Refer to your response to prior comments 48 and 49, and please address the following:
 - Disclose the date(s) as of which you assumed the pro forma adjustments within your Pro Forma Stockholders' Equity and Pro forma net loss per share.
 - Given that you disclose in Note 10c the Series Preferred will automatically convert into common stock immediately upon the closing of an IPO of common stock...that generates aggregate gross proceeds of not less than \$20 million, tell us why you have excluded the conversion of preferred stock from your Pro forma net loss per share and Weighted-average pro forma shares outstanding. It appears that the pro forma conversion of your Series Preferred upon the closing of an IPO will result in a material increase in your loss per share and would be material to an investor.
 - Regarding your pro forma for the conversion of Series E preferred stock reflected throughout the filing, please confirm whether you will use the midpoint of the IPO price range, once it is determined, in order to estimate the number of common shares issuable upon conversion of your Series E preferred stock. It appears that the pro forma 15% discount in connection with the IPO as discussed in Note 9 would be material to an investor.

(k) Research and Development, page F-13

9. Tell us the nature of the costs that were reclassified to research and development expense.

(n) Stock Option Valuation, page F-14

- 10. Refer to your response to prior comment 50 and address the following:
 - In your response, you make reference to the measurement date and the measurement date under GAAP. Please clarify whether your references to the measurement date meet the definition of grant date as defined in ASC 718-10-35-6.
 - You state that there was and is a substantial future service requirement for the employees to vest in the full amount of these grants. Please confirm whether you concluded the service inception date did not precede the grant date. Refer to ASC 718-10-35-6 and 718-10-55-108.
 - Finally, you disclose on page F-28 that some options have effective vesting periods that begin prior to the date of grant, (and) in such cases, compensation expense is recognized for the vested portion of the award upon grant. It appears that on the GAAP grant date, you recorded cumulative compensation expense dating back to the vesting start date. Please tell us what accounting literature you relied upon to record cumulative expense on the GAAP grant date and provide us your accounting analysis under that literature.

Note 12 – Common Stock Equity Incentive Plan, page F-29

11. Refer to your response to prior comment 52. Please provide us the names of the public comparables you selected and the range of time over which you measured volatility for each volatility assumption. In addition, disclose the assumptions for each year for which an income statement is presented, that is, 2008 assumptions should be disclosed.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Staci Shannon at (202) 551-3374 or Lisa Vanjoske at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Jennifer Riegel at (202) 551-3575, Daniel Greenspan at (202) 551-3623 or me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler Assistant Director

cc: James C.T. Linfield
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