

Mail Stop 3561

June 4, 2010

Douglas Van Oort, Chief Executive Officer
NeoGenomics, Inc.
12701 Commonwealth Drive, Suite 9
Fort Myers, FL 33913

RE: NeoGenomics, Inc.
Form 10-K FYE December 31, 2009
Filed March 29, 2010
File No. 333-72097

Dear Mr. Van Oort:

We have reviewed your filing and have the following comments. Where indicated, we think you should file the requested documents in your next periodic report or provide the requested information in future filings. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Part III.

General

1. We note that you have not included any disclosure in response to Item 402(s) of Regulation S-K. Please advise us of the basis for your conclusion that disclosure is not necessary and describe the process you undertook to reach that conclusion.

Item 9A(T). Controls and Procedures – Evaluation of Disclosure Controls and Procedures, page 73

2. You indicate that your disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives. Please confirm to us that you will disclose in future Exchange Act filings that your principal executive officer and principal financial officer concluded that your disclosure controls and procedures are effective at that reasonable assurance level. In the alternative, you may remove the reference to the level of assurance of your disclosure controls and procedures.

Item 10. Directors, Executive Officers and Corporate Governance, page 76

3. In future filings, please provide a discussion of the experience, qualifications, attributes or skills of each director and person nominated to become a director that led to the conclusion that the person should serve as a director in light of the company's business and structure. In your response letter, please provide us with a draft of your proposed disclosure. Please refer to Item 401(e) of Regulation S-K. Such information should be provided on an individual basis. For general guidance please refer to Question 116.05 of the Compliance and Disclosure Interpretations.

Outstanding Equity Awards at Fiscal Year End, page 80

4. In future filings, please disclose the aggregate grant date fair value of the option awards as computed in accordance with FASB Accounting Standards Codification Topic 718. See Item 402(r)(2)(iv) of Regulation S-K

Part IV

Item 15. Exhibits

5. We note that exhibits 10.24, 10.25, 10.26, 10.27, 10.32, 10.35, 10.36, 10.38, 10.39, 10.41, and 10.42 to the Form 10-K and Exhibit 10.44 to the Form 10-Q for the quarter ended March 31, 2010 have omitted certain schedules, attachments, or exhibits. Please file with your next periodic report these exhibits in their entirety as required by to Item 601(b)(10) of Regulation S-K or advise.

Closing Comments

As appropriate, respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Blaise Rhodes, staff accountant, at (202) 551-3774 or Brian Bhandari, accounting reviewer, at (202) 551-3390 if you have questions regarding comments on the financial statements and related matters. Please contact Janice McGuirk, examiner, at (202) 551-3395 or Pam Howell, legal reviewer, at (202) 551-3357 with any other questions.

Sincerely,

John Reynolds,
Assistant Director

cc: via fax (239) 768-1672

Douglas Van Oort
NeoGenomics, Inc.
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