

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM S-8

Registration Statement
Under the Securities Act of 1933

NEOGENOMICS, INC.
(Name of Registrant in its charter)

NEVADA 74-2897368
(State or jurisdiction of (I.R.S. Employer
incorporation or organization) Identification No.)

12701 Commonwealth Drive, Suite 9
Fort Myers, Florida 33913
(239) 768-0600
(Address, including zip code, and telephone number,
including area code, of Registrant's principal executive offices)

AMENDED AND RESTATED NEOGENOMICS EQUITY INCENTIVE PLAN
NEOGENOMICS, INC. EMPLOYEE STOCK PURCHASE PLAN
(Full Title of the Plan)

Robert P Gasparini, President
12701 Commonwealth Drive, Suite 9
Fort Myers, Florida 33913
(239) 768-0600
(Name, address, including zip code, and telephone number,
including area code, of agent for service)

With copies to:

Clayton E. Parker, Esq.
Kirkpatrick & Lockhart Nicholson Graham LLP
201 South Biscayne Boulevard, Suite 2000
Miami, Florida 33131
Telephone: (305) 539-3300
Telecopier: (305) 358-7095

CALCULATION OF REGISTRATION FEE

Title of Securities to Be Registered	Amount To be Registered	Proposed Maximum Offering Price per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value	1,594,065 (2)	\$1.55 (1)	\$2,470,801	\$264.38
Common Stock, \$0.001 par value	320,324 (3)	\$1.55 (1)	\$ 496,502	\$ 53.13
Total	1,914,389	N/A	\$2,967,303	\$317.50

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(h)(1) of the Securities Exchange Act of 1934, as amended. The Proposed Maximum Offering Price Per Share, Proposed Maximum Aggregate Offering Price and Amount of Registration Fee were computed based upon the average of the high and low prices of the shares of NeoGenomics, Inc.'s common stock as reported on the NASD OTC Bulletin Board on December 15, 2006.

(2) Represents the registration of an aggregate of 1,594,065 shares of common stock of NeoGenomics, Inc. issuable upon exercise of options reserved for grant under the Amended and Restated NeoGenomics Equity Incentive Plan. These shares of common stock are being registered in addition to shares of common stock previously registered under a Registration Statement on Form S-8 dated June 21, 2005 for issuance under the Plan.

(3) Represents the registration of an aggregate of 320,324 shares of common stock of NeoGenomics, Inc. issuable upon purchase by eligible employees under the NeoGenomics, Inc. Employee Stock Purchase Plan approved by the Company's stockholders on October 31, 2006.

INTRODUCTION

This registration statement on Form S-8 (this "Registration Statement") is filed by NEOGENOMICS, INC. (the "Company" and also referred to herein as "our", "we" or "us") relating to (a) 1,594,065 shares of our common stock, par value \$0.001 per share ("Common Stock"), issuable to our eligible employees, directors and consultants under the Amended and Restated NeoGenomics Equity Incentive Plan and (b) 320,324 shares of our Common Stock issuable to our eligible employees, directors and consultants under the NeoGenomics, Inc. Employee Stock Purchase Plan.

PART I

The documents containing the information specified in Part I of Form S-8 (plan information and registrant information) will be sent or given to employees as specified by Rule 428(b)(1) of the Securities Act of 1933, as amended (the "Act"). Such documents need not be filed with the U.S. Securities and Exchange Commission (the "Commission") either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424. These documents, which include the statement of availability required by Item 2 of Form S-8, and the documents incorporated by reference in this Registration Statement pursuant to Item 3 of Form S-8 (Part II hereof), taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Act.

PART II

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The following documents have been previously filed by the Company with the Commission and are hereby incorporated by reference into this Registration Statement as of their respective dates:

- (a) The Annual Report of the Company on Form 10-KSB for the fiscal year ended December 31, 2005, as filed with the Commission on April 3, 2006; and
- (b) The Quarterly Report of the Company on Form 10-QSB for the period ended March 31, 2006, filed with the Commission on May 9, 2006; and
- (c) The Quarterly Report of the Company on Form 10-QSB for the period ended June 30, 2006, filed with the Commission on July 19, 2006; and
- (d) The Quarterly Report of the Company on Form 10-QSB for the period ended September 30, 2006, filed with the Commission on November 17, 2006.
- (e) All other reports filed pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") since the end of the fiscal year covered by the document referred to in subsection (a) above.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

All documents subsequently filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this Registration Statement, but prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered by this Registration Statement have been sold or which deregisters all such securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement from the date of the filing of such document with the Commission until the information contained therein is superseded or updated by any subsequently filed document that is incorporated by reference into this Registration Statement or by any document that constitutes part of the prospectus relating to the Amended and Restated NeoGenomics Equity Incentive Plan and the NeoGenomics Employee Stock Purchase Plan that meets the requirements of Section 10(a) of the Securities Act.

ITEM 4. DESCRIPTION OF SECURITIES.

Common Stock

We are authorized to issue One Hundred Million (100,000,000) shares of Common Stock, par value \$0.001 per share, of which 27,261,476 shares were issued and outstanding at December 18, 2006.

The securities being offered hereby are Common Stock. The outstanding shares of Common Stock are fully paid and non-assessable. The holders of Common Stock are entitled to one vote per share for the election of directors and with respect to all other matters submitted to a vote of stockholders. Shares of Common Stock do not have cumulative voting rights, which means that the holders of more than fifty percent (50%) of such shares voting for the election of directors can elect one hundred percent (100%) of the directors if they choose to do so. Our Common Stock does not have preemptive rights, meaning that the common stockholders' ownership interest in us would be diluted if additional shares of Common Stock are subsequently issued and the existing stockholders are not granted the right, in the discretion of our Board of Directors, to maintain their ownership interest in our Company.

Upon liquidation, dissolution or winding-up, our assets, after the payment of debts and liabilities and any liquidation preferences of, and unpaid dividends on, any class of preferred stock then outstanding, will be

distributed pro-rata to the holders of the Common Stock. The holders of our Common Stock do not have preemptive or conversion rights to subscribe for any our securities and have no right to require us to redeem or purchase their shares. The holders of Common Stock are entitled to share equally in dividends, if, as and when declared by our Board of Directors, out of funds legally available therefore, subject to the priorities given to any class of preferred stock which may be issued.

Preferred Stock

We are authorized to issue Ten Million (10,000,000) shares of preferred stock, having a par value of \$0.001 per share (the Preferred Stock). The Preferred Stock may be issued from time to time in one or more series. The Board of Directors is authorized to fix or alter the dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), the redemption price or prices, the liquidation preferences of any wholly unissued series of Preferred Stock, and the number of shares constituting any such series and the designation thereof, or any of them; and to increase or decrease the number of shares of any series subsequent to the issue of shares of that series, but not below the number of shares of such series then outstanding and which we may be obligated to issue under options, warrants or other contractual commitments. In case the number of shares of any series shall be so decreased, the shares constituting such decrease shall resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series. As of July 26, 2006, no such shares have been designated.

Warrants

As of December 18, 2006, we currently have 4,770,941 warrants outstanding, all of which are vested. The exercise price of these warrants range from \$0.16 to \$0.68 per share.

Options

As of December 18, 2006, we currently have 2,309,333 options outstanding. The exercise price of these options range from \$0.16 to \$1.26 per share.

Transfer Agent

Our transfer agent is Standard Registrar & Transfer Company 12528 South 1840 East Draper, Utah 84020. The transfer agent's telephone number is (801) 571-8844.

Reports To Stockholders

We intend to furnish our stockholders with annual reports which will describe the nature and scope of our business and operations for the prior year and will contain a copy of our audited financial statements for its most recent fiscal year.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL.

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

The Company's Articles of Incorporation eliminate liability of its directors and officers for breaches of fiduciary duties as directors and officers, except to the extent otherwise required by the Nevada Revised Statutes and where the breach involves intentional misconduct, fraud or a knowing violation of the law.

Nevada Revised Statutes 78.750, 751, and 752 have similar provisions that provide for discretionary and mandatory indemnification of officers, directors, employees and agents of a corporation. Under these provisions, such persons may be indemnified by a corporation against expenses, including attorney's fees, judgment, fines and amounts paid in settlement, actually and reasonably incurred by him in connection with the action, suit or proceeding, if he acted in good faith and in a manner which he reasonably believed to be in or opposed to the best interests of the corporation and with respect to any criminal action or proceeding, had no reasonable cause to any action, suit or proceeding, had no reasonable cause to believe his conduct was unlawful.

To the extent that a director, officer, employee or agent of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding, or in defense of any claim, issue or matter, he must be indemnified by a corporation against expenses, including attorney's fees, actually and reasonably incurred by him in connection with the defense.

Any indemnification, unless ordered by a court or advanced by a corporation, must be made only as authorized in the specific case upon a determination that indemnification of the director, officer, employee or agent is proper in the circumstances. The determination must be made:

- o By the stockholders;
- o By the board of directors by majority vote of a quorum consisting of directors who were not parties to that act, suit or proceeding;
- o If a majority vote of a quorum consisting of directors who were not parties to the act, suit or proceeding cannot be obtained, by independent legal counsel in a written opinion; or
- o If a quorum consisting of directors who were not parties to the act, suit or proceeding cannot be obtained, by independent legal counsel in a written opinion;
- o Expenses of officers and directors incurred in defending a civil or criminal action, suit or proceeding must be paid by the corporation as they are incurred and in advance of the final disposition of the action, suit or proceeding, upon receipt of an undertaking by the director or officer to repay the amount if it is ultimately determined by a court of competent jurisdiction that he is not entitled to be indemnified by a corporation.
- o To the extent that a director, officer, employee or agent of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections 1 and 2, or in defense of any claim, issue or matter therein, a corporation shall indemnify him against expenses, including attorneys' fees, actually and reasonably incurred by him in connection with the defense.

Insofar as indemnification for liabilities arising under the Act may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the Company in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person connected with the securities being registered, the Company will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED.

Not Applicable.

ITEM 8. EXHIBITS.

<u>Exhibit Number</u>	<u>Description</u>
5.1(1)	Opinion of Burton, Bartlett & Glogovac
23.1(1)	Consent of Kingery & Crouse, P.A.
23.2(2)	Consent of Burton, Bartlett & Glogovac
99.1(3)	Amended and Restated NeoGenomics Equity Incentive Plan
99.2(3)	NeoGenomics Employee Stock Purchase Plan

(1) Provided herewith.

(2) Incorporated by reference to Exhibit 5.1.

(3) Incorporated by Reference to the 10-QSB originally filed with the Commission on November 17, 2006

ITEM 9. UNDERTAKINGS.

The undersigned Registrant hereby undertakes:

(1) To file, during any period in which it offers or sells securities, a post-effective amendment to this Registration Statement to:

(i) Include any prospectus required by Section 10(a)(3) of the Act;

(ii) Reflect in the prospectus any facts or events which, individually or together, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a twenty percent (20%) change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement;

(iii) Include any additional or changed information on the plan of distribution.

(2) For determining liability under the Act, the Company will treat each such post-effective amendment as a new registration statement of the securities offered, and the offering of such securities at that time to be the initial *bona fide* offering.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) For determining liability of the undersigned small business issuer under the Act to any purchaser in the initial distribution of the securities, the undersigned small business issuer undertakes that in a primary offering of securities of the undersigned small business issuer pursuant to this Registration Statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned small business issuer will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

Any preliminary prospectus or prospectus of the undersigned small business issuer relating to the offering required to be filed pursuant to Rule 424;

Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned small business issuer or used or referred to by the undersigned small business issuer;

The portion of any other free writing prospectus relating to the offering containing material information about the undersigned small business issuer or its securities provided by or on behalf of the undersigned small business issuer; and

Any other communication that is an offer in the offering made by the undersigned small business issuer to the purchaser.

Insofar as indemnification for liabilities arising under the Act may be permitted to directors, officers and controlling persons of the small business issuer pursuant to the foregoing provisions, or otherwise, the small business issuer has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Act, and is, therefore, unenforceable.

In the event that a claim for indemnification against such liabilities (other than the payment by the small business issuer of expenses incurred or paid by a director, officer or controlling person of the small business issuer in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the small business issuer will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act, and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Company certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the State of Florida, on December 15, 2006.

NEOGENOMICS, INC.

Date: December 18, 2006

By: /s/ Robert P. Gasparini
Robert P. Gasparini
President and Principal Executive Officer

Date: December 18, 2006

By: /s/ Jerome J. Dvonch
Jerome J. Dvonch
Principal Accounting Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement on Form S-8 has been signed by the following persons in the capacities and on the dates indicated below:

<u>Signatures</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Michael T. Dent</u> Michael T. Dent, M.D.	Chairman of the Board	December 7, 2006
<u>/s/ Robert P. Gasparini</u> Robert P. Gasparini	President and Director	December 7, 2006
<u>/s/ Steven C. Jones</u> Steven C. Jones	Director	December 7, 2006
<u>/s/ George O'Leary</u> George O'Leary	Director	December 7, 2006
<u>/s/ Peter M. Petersen</u> Peter M. Petersen	Director	December 7, 2006

December 18, 2006

NeoGenomics, Inc.
12701 Commonwealth Drive, Suite 9
Fort Myers, Florida 33913

Ladies and Gentlemen:

We have acted as your counsel in connection with the Registration Statement on Form S-8 (the "Registration Statement") filed with the U.S. Securities and Exchange Commission under the Securities Act of 1933, as amended (the "1933 Act") for the registration of 1,065,895 shares (the "Shares") of common stock, par value \$0.001 per share, of NeoGenomics, Inc., a Nevada corporation (the "Company").

You have requested our opinion as to the matters set forth below in connection with the Registration Statement. For purposes of rendering this opinion, we have examined the Registration Statement, the Company's articles of incorporation, as amended, and bylaws, and the corporate action of the Company that provides for the issuance of the Shares, and we have made such other investigation as we have deemed appropriate. We have examined and relied upon certificates of public officials and, as to certain matters of fact that are material to our opinion, we have also relied on a certificate of an officer of the Company. In rendering our opinion we have assumed the genuineness of signatures on the documents we have examined, the conformity to authentic original documents of all documents submitted to us as copies, and have also made the assumptions that are customary in opinion letters of this kind. We have not verified any of those assumptions.

This opinion is rendered as of the date of this letter and is limited to matters of Nevada corporate law, including applicable provisions of the Nevada Constitution and reported judicial decisions interpreting those laws. We express no opinion as to the laws of any other state, the federal law of the United States, or the effect of any applicable federal or state securities laws.

Based upon and subject to the foregoing, it is our opinion that the Shares are duly authorized for issuance by the Company and, when issued and paid for in accordance with the provisions of the Amended and Restated NeoGenomics, Inc. Equity Incentive Plan and the NeoGenomics, Inc. Employee Stock Purchase Plan as described in the Registration Statement, will be validly issued, fully paid,

and nonassessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement. In giving our consent we do not admit that we are in the category of persons whose consent is required under Section 7 of the 1933 Act or the rules and regulations under such act.

Very truly yours,

/S/ BURTON, BARTLETT & GLOGAVAC

EXHIBIT 23.1

[Letterhead of Kingery & Crouse, P.A.]

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Neogenomics, Inc.
12701 Commonwealth Drive, Suite 9
Fort Meyers, FL 33913

To the Board of Directors and stockholders of Neogenomics, Inc. and subsidiary:

As independent public accountants, we hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated April 3, 2006 included in the Annual Report on Form 10-KSB of Neogenomics, Inc. as of December 31, 2005 and for the years ended December 31, 2005 and 2004.

/s/ Kingery & Crouse, P.A.
Tampa, FL

December 15, 2006