

Mail Stop 4561

September 17, 2008

Stephen D. Barnhill, M.D.
Chief Executive Officer
Health Discovery Corporation
2 East Bryan Street, Suite #601
Savannah, GA 31401

**Re: Health Discovery Corporation
Amendment No. 1 to Registration Statement on Form S-1
Filed September 2, 2008
File No. 333-150878**

Dear Dr. Barnhill:

We have reviewed your response letter dated September 15, 2008 and have the following comments.

Exhibits

1. We note your response to comment 2 of our letter dated September 12, 2008 regarding the License and Development Agreement with DCL Medical Laboratories, LLC. Because Michael Hanbury is a director of the company and President and Chief Executive Officer of DCL Medical Laboratories, it appears that this agreement may need to be filed under Item 601(b)(10)(ii)(A) of Regulation S-K. Please provide us with your views in this regard or otherwise file the agreement as a material contract.

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Stephen D. Barnhill, M.D.
Health Discovery Corporation
September 17, 2008
Page 2

If you have any questions, please call Jan Woo at (202) 551-3453. If you require further assistance, you may contact me at (202) 551-3397. If, thereafter, you require additional assistance, you may contact the Assistant Director, Barbara C. Jacobs, at (202) 551-3735.

Sincerely,

Jay E. Ingram
Attorney-Advisor

cc: Via Facsimile (404) 572-6999
M. Todd Wade, Esq.
Powell Goldstein LLP
Telephone: (404) 572-6600