

Mail Stop: 3561- CF/AD 11

August 22, 2005

Via U.S. Mail and Fax (912) 598-8776

Mr. Stephen D. Barnhill, M.D.
Chief Executive Officer
Health Discovery Corporation
1116 South Old Temple Road
Lorena, TX 76655

**RE: Health Discovery Corporation
Form 8-K of August 11, 2005 filed on August 16, 2005
File No. 333-62216**

Dear Mr. Barnhill:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. 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 more 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.

1. Please amend your Form 8-K to cover the interim period from the date of the last audited financial statements to August 11, 2005. See Item 304(a)(1)(iv) of Regulation S-B. Include an updated letter from Darilek & Butler (the “former auditor”) addressing your revised disclosure as an exhibit to your Form 8-K/A.
2. Tell us if your former auditor was registered with the Public Company Accounting Oversight Board, if not registered with the PCAOB, please note that they can not perform any audit services for you.
3. State whether, during your two most recent fiscal years and any subsequent interim period before your former auditor resigned, declined to stand for re-election, or was dismissed; you had any disagreements with your former auditor on any matter of accounting principle or practice, financial statement disclosure, or auditing scope or procedure.
4. Please amend your Form 8-K to state whether your former auditor, resigned, declined to stand for re-election, or was dismissed. Disclose the date your relationship ended. Also, indicate whether the decision to change auditors was recommended or approved by your board of directors.
5. Disclose whether the former auditor’s report on your financial statements for either of the past two years contained an adverse opinion, a disclaimer of opinion, or was qualified or modified as to uncertainty, audit scope or accounting principles and, if so, describe the nature of each adverse opinion, disclaimer of opinion, modification or qualification.

As appropriate, please amend your filing and respond to these comments within five business days or tell us when you will respond. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment 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 amendment and 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.

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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 Gopal Dharia, Staff Accountant, at (202) 551-3353 or Terry French, Accountant Branch Chief, at (202) 551-3828 if you have questions regarding comments on the Form 8-K.

Sincerely,

Terry French
Accountant Branch Chief