



DIVISION OF  
CORPORATION FINANCE

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

May 12, 2011

H. Thomas Watkins  
President and Chief Executive Officer  
Human Genome Sciences, Inc.  
14200 Shady Grove Road  
Rockville, MD 20850-7464

**Re: Human Genome Sciences, Inc.  
Definitive Proxy on Schedule 14A  
Filed March 30, 2011  
File No. 001-14169**

Dear Mr. Watkins:

We have reviewed your filing 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 within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. 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 filing and the information you provide in response to these comments, we may have additional comments.

Compensation Discussion & Analysis

Compensation Elements, page 41

1. We note your statement on page 40 that “The purpose of the cash incentive award program for named executive officers is to motivate and reward the achievement of specific preset corporate goals, agreed to in advance by the Board of Directors, along with the achievement of individual performance goals.” We note that you have disclosed on page 42 the executive team’s achievement of certain corporate goals, however you have not provided similar disclosure with respect to the individual performance goals. Please advise us of the extent to which the Compensation Committee considered individual performance goals in its determination of cash incentive awards for your named executive officers. Specifically, please tell us the individuals performance goals set for each named executive officer, the Compensation Committee or CEO’s (as applicable) evaluation of each named executive officer’s achievement of such

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performance goals and how such achievement was considered in determining the cash incentive awards.

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 Exchange Act of 1934 and all applicable Exchange 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.

In responding to our comments, please provide a written 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.

You may contact Karen Ubell at (202) 551-3873, Dan Greenspan at (202) 551-3623 or me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler  
Assistant Director