Via Facsimile and U.S. Mail Mail Stop 6010

March 18, 2009

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

Re: Human Genome Sciences, Inc.

Form 10-K for Fiscal Year Ended December 31, 2007 Form 10-Q for the Quarterly Period Ended September 30, 2008 File No. 1-14169

Dear Mr. Watkins:

We have completed our review of your Form 10-K and 10-Q and have no further comments at this time.

Sincerely,

Joel Parker Accounting Branch Chief