



DIVISION OF
CORPORATION FINANCE

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

February 24, 2012

Via E-mail

Mr. James S. Evans
Chief Financial Officer
Myriad Genetics, Inc.
320 Wakara Way
Salt Lake City, UT 84108

**Re: Myriad Genetics, Inc.
Form 10-K for the Fiscal Year Ended June 30, 2011
Filed August 15, 2011
File No. 000-26642**

Dear Mr. Evans:

We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your document. In our comments, we ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within 10 business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing the information you provide in response to these comments, we may have additional comments and/or request that you amend your filing.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 43

1. Please provide us proposed disclosure to be included in future periodic reports that quantifies each significant factor that resulted in the increase in research and development costs for each period. For example, quantify how much related to your existing products, new products being developed internally, products being acquired, etc.

Notes to Consolidated Financial Statements

Note 8. Income Taxes, page F-20

2. Please address the following:
 - Reconcile for us the \$31,653,000 of excess tax benefits that you state was credited to additional paid in capital during the year ended June 30, 2011 to where that amount is

included in your consolidated statements of stockholders' equity and show us the journal entry you made to record this amount.

- Refer to the \$58,831,000 stock-based compensation tax benefits credited to additional paid in capital in your statements of stockholders' equity during the year ended June 30, 2011 and the same amounts reflected as an adjustment reducing net cash provided by operating activities and increasing net cash provided by financing activities in your consolidated statement of cash flows. Reconcile this benefit to the table of current and deferred income tax expense and to the table that reconciles your income tax expense to the statutory federal income tax rate. Further, tell us how reflecting these line items in your statement of cash flows complies with GAAP.
- Reconcile the \$35,024,000 change in valuation allowance during the year ended June 30, 2011 reflected in your table of current and deferred income tax expense to the 2.1% change in valuation allowance reflected in the table that reconciles your income tax expense to the statutory federal income tax rate.
- Tell us the factors that determined whether net operating losses are reflected as deferred income tax assets versus those that are not and how your accounting complies with GAAP.
- Refer to your discussion of income tax expense on page 44 in MD&A under results of operations for the years ended June 30, 2011 and 2010. Provide us support for the statement that the income tax benefit of \$11.5 million in 2010 consisted of the reversal in full of your valuation allowance when your valuation allowance at June 30, 2010 was \$39,786,000. Also provide us support for your statement that 2011 contained no benefit from the reversal of previous valuation allowances given that you show \$35,024,000 change in valuation allowance during the year ended June 30, 2011 reflected in your table of current and deferred income tax expense. Further, tell us why your discussion of income tax expense for 2011 does not address the \$58,831,000 stock-based compensation tax benefits shown as a reduction to adjust net income in your statement of cash flows. If necessary after reconsidering statements you have made in this discussion, provide us revised proposed disclosure of the discussion of income tax expense for 2011 and 2010 to be included in future periodic reports.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in this 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;

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- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to this 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 Dana Hartz, Staff Accountant, at (202) 551-3648 or Mary Mast, Senior Staff Accountant, at (202) 551-3613 if you have questions regarding these comments. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

/s/ Jim B. Rosenberg

Jim B. Rosenberg
Senior Assistant Chief Accountant