



DIVISION OF
CORPORATION FINANCE

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

June 21, 2010

Douglas E. Williams, Ph.D.
Chief Executive Officer
ZymoGenetics, Inc.
1201 Eastlake Avenue East
Seattle, WA 98102

**Re: ZymoGenetics, Inc.
Schedule 14A
Filed April 30, 2010
File No. 000-33489**

Dear Dr. Williams:

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.

Schedule 14A

Executive Compensation

Compensation Discussion and Analysis, page 13

Annual Incentives, page 15 and Long-Term Incentives, page 17

1. We note your disclosure on page 16 that 40% of your named executive officers' annual incentive awards (except for Dr. Williams) is based on actual individual achievement of a series of individualized performance goals related to his or her area of responsibility. Similarly, you disclose on page 17 that 80% of your named executive officers' long-term incentive awards is based on actual achievement of individual performance goals related to his or her area of responsibility. Your Compensation Discussion and Analysis does not disclose the individual objectives used to determine these executive officers' annual

incentive bonus and long-term incentive award. Please amend your disclosure to provide the following:

- The individual performance objectives; and
- A discussion of how the level of achievement of each objective affected the actual bonuses to be paid or the stock options granted.

To the extent that the objectives are quantitative, the discussion in your proxy statement should also be quantitative.

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 Rose Zukin at (202) 551-3239 or me at (202) 551-3715 if you have questions.

Sincerely,

Jeffrey P. Riedler
Assistant Director