



DIVISION OF
CORPORATION FINANCE

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

August 24, 2010

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

Re: ZymoGenetics, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2009
Filed March 1, 2010
Schedule 14A
Filed April 30, 2010
File No. 000-33489

Dear Dr. Williams:

We have completed our review of your filings and do not have any further comments at this time.

Sincerely,

Jeffrey P. Riedler
Assistant Director