

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT PURSUANT  
TO SECTION 13 OR 15(D) OF THE  
SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): May 7, 2010

**Enzo Biochem, Inc.**

(Exact Name of Registrant as Specified in Its Charter)

**New York**

(State or Other Jurisdiction of Incorporation)

**001-09974**

(Commission File Number)

**13-2866202**

(IRS Employer Identification No.)

**527 Madison Avenue  
New York, New York**

(Address of Principal Executive Offices)

**10022**

(Zip Code)

**(212) 583-0100**

(Registrant's Telephone Number, Including Area Code)

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions *see* General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

**Item 5.02**                    **Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.**

Dr. Christine Fischette, who had been serving as the President of Enzo Therapeutics, has separated from the Company, and will be pursuing other interests.

Enzo continues to develop its therapeutic projects, including its two most advanced programs, Optique1™ and Aleque1™, and is continuing to seek partnering opportunities for its all of its clinical activities in line with the Company's stated objective of repositioning its therapeutics unit. Enzo believes that this realignment of resources will allow its Therapeutics unit to contribute more directly to the expansion of its companion diagnostics efforts.

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ENZO BIOCHEM, INC.

Date: May 11, 2010

By: /s/ Barry W. Weiner

Barry W. Weiner  
President