

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): August 12, 2010

Enzo Biochem, Inc.

(Exact Name of Registrant as Specified in Its Charter)

New York

(State or Other Jurisdiction of Incorporation)

001-09974

13-2866202

(Commission File Number)

(IRS Employer Identification No.)

527 Madison Avenue
New York, New York

10022

(Address of Principal Executive Offices)

(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.

On August 12, 2010, Enzo Biochem, Inc. announced that Dr. Carl Balezentis, President of the Company's Enzo Life Sciences, Inc. ("ELS") subsidiary has taken a medical leave of absence, effective immediately. Andrew Whiteley, Chief Operating Officer of ELS has assumed all duties and responsibilities for leadership of the ELS global organization in addition to his current duties as COO.

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.

Date: August 12, 2010

ENZO BIOCHEM, INC.

By: /s/ Barry W. Weiner

Barry W. Weiner
President
