

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 31, 2007

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 1.01. ENTRY INTO A MATERIAL DEFINITIVE AGREEMENT.

Effective May 31, 2007, Enzo Life Sciences, Inc. ("Enzo Life Sciences"), a wholly owned subsidiary of Enzo Biochem, Inc. (the "Company"), completed its acquisition of all of the issued and outstanding capital stock of Axxora Life Sciences, Inc. ("Axxora") from the holders thereof (the "Stockholders"), pursuant to a Stock Purchase Agreement dated as of May 29, 2007 (the "Agreement") by and among Enzo Life Sciences, Axxora and the Stockholders. The purchase price paid by Enzo Life Sciences to the Stockholders was \$16,321,750 in cash, \$14,991,750 of which was paid to the Stockholders at the closing of the acquisition, \$1,280,000 was paid into an escrow account for a one-year period to satisfy all or part of any indemnification obligations of the Stockholders under the Agreement, and \$50,000 was paid into a separate escrow account for a one-year period to pay certain out-of-pocket expenses of the representatives of the Stockholders in connection with the transaction. Axxora is now a wholly-owned subsidiary of Enzo Life Sciences and an indirect wholly-owned subsidiary of the Company.

Prior to the transactions contemplated by the Agreement, the employment agreements referenced below, and the other ancillary agreements referred to in the Agreement, there were no material relationships between any of Axxora or the Stockholders on the one hand, and the Company or any of its affiliates, any director or officer of the Company, or any associate of any such director or officer, on the other hand.

In connection with the consummation of the transactions contemplated by

the Agreement, Axxora, LLC, a wholly-owned subsidiary of Axxora and an indirect wholly-owned subsidiary of Enzo Life Sciences, entered into employment agreements, effective June 1, 2007, with Tamara Sales and Brian Conkle. Under the terms of these employment agreements, Ms. Sales will serve as Vice President--Finance and Administration of Axxora, LLC's life sciences business unit, and Mr. Conkle will serve as Vice President of Sales of Axxora, LLC's life sciences business unit. Alexis Corporation, a wholly-owned subsidiary of Axxora and an indirect wholly-owned subsidiary of Enzo Life Sciences, entered into employment agreements, effective June 1, 2007, with Georges Chappuis, Ph.D. and Silvia Dettwiler. Under the terms of these employment agreements, Dr. Chappuis will serve as President of Alexis Corporation, and Ms. Dettwiler will serve as Alexis Corporation's Vice President Operations Europe.

ITEM 2.01. COMPLETION OF ACQUISITION OR DISPOSITION OF ASSETS.

Effective May 31, 2007, Enzo Life Sciences completed its acquisition of all of the issued and outstanding capital stock of Axxora pursuant to the Agreement referenced above in Item 1.01. The purchase price paid by Enzo Life Sciences to the Stockholders was \$16,321,750 in cash. Axxora is now a wholly owned subsidiary of Enzo Life Sciences and an indirect wholly-owned subsidiary of the Company.

The disclosures contained in Item 1.01 of this Current Report on Form 8-K are incorporated by reference in their entirety into this Item 2.01. The press release issued by the Company announcing the foregoing is attached hereto as Exhibit 99.1 and is incorporated herein in its entirety by reference.

ITEM 9.01. FINANCIAL STATEMENTS AND EXHIBITS.

- (a) FINANCIAL STATEMENTS OF BUSINESS ACQUIRED. Not applicable.
- (b) PRO FORMA FINANCIAL INFORMATION. Not applicable.
- (c) SHELL COMPANY TRANSACTIONS. Not applicable.
- (d) EXHIBITS.

| EXHIBIT NO. | DESCRIPTION |
|-------------|---|
| 99.1 | Press Release of Enzo Biochem, Inc. dated June 5, 2007. |

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: June 5, 2007 By: /s/ Elazar Rabbani

Dr. Elazar Rabbani
Chairman of the Board and Chief
Executive Officer

EXHIBIT INDEX

| EXHIBIT NO. | DESCRIPTION |
|-------------|---|
| 99.1 | Press Release of Enzo Biochem, Inc. dated June 5, 2007. |

Enzo Biochem, Inc.
527 Madison Avenue
New York, NY 10022

ENZO LIFE SCIENCES, INC., COMPLETES ACQUISITION OF
AXXORA LIFE SCIENCES, INC.

NEW YORK, NY, June 5, 2007 - Enzo Biochem Inc. (NYSE:ENZ) announced today that its wholly owned subsidiary, Enzo Life Sciences, Inc., has completed the acquisition of Axxora Life Sciences, Inc., a privately owned global manufacturer and marketer of life science research products.

"The integration of Axxora into Enzo Life Sciences is already underway, I'm pleased to say," said Barry Weiner, President of Enzo. "We are in the process of overlaying its considerable capabilities in marketing and distribution with Enzo Life Sciences proprietary platforms and products in the growing areas of nucleic acid labeling and detection technology. The acquisition represents an excellent fit, one that will broaden Enzo's national and international reach, enable our Company to build critical mass both via acquisition and organically, and enhance results in this sector."

"We likewise are excited about our new relationship and look forward to closely working with Enzo Life Sciences towards the goals of maximizing growth opportunities and achieving operating efficiencies for the combined companies," added Georges Chappuis, Ph.D., President of Axxora.

ABOUT ENZO

Enzo Biochem is engaged in the research, development and manufacture of innovative health care products based on molecular biology and genetic engineering techniques, and in providing diagnostic services to the medical community. Enzo's Life Sciences division develops, produces and markets proprietary labeling and detection products for gene sequencing and genetic analysis. Its catalog of over 300 products serves the molecular biology, drug discovery and pathology research markets. The Company's therapeutic division is in various stages of clinical evaluation of its proprietary gene medicine for HIV-1 infection and its proprietary immune regulation medicines for uveitis, Crohn's Disease, and NASH (non-alcoholic steatohepatitis), and conducts pre-clinical research on several candidate compounds aimed at producing new mineral and organic bone, including technology that could provide therapy for osteoporosis and fractures, among other applications. Enzo's Clinical Labs division provides routine and esoteric reference laboratory services for physicians in the New

York Metropolitan area. Underpinning the Company's technology and operations is an extensive intellectual property estate in which Enzo owns or licenses over 200 patents worldwide and has pending applications for over 180 more. For more information, visit our website WWW.ENZO.COM.

EXCEPT FOR HISTORICAL INFORMATION, THE MATTERS DISCUSSED IN THIS NEWS RELEASE MAY BE CONSIDERED "FORWARD-LOOKING" STATEMENTS WITHIN THE MEANING OF SECTION 27A OF THE SECURITIES ACT OF 1933, AS AMENDED AND SECTION 21E OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED. SUCH STATEMENTS INCLUDE DECLARATIONS REGARDING THE INTENT, BELIEF OR CURRENT EXPECTATIONS OF THE COMPANY AND ITS MANAGEMENT. INVESTORS ARE CAUTIONED THAT ANY SUCH FORWARD-LOOKING STATEMENTS ARE NOT GUARANTEES OF FUTURE PERFORMANCE AND INVOLVE A NUMBER OF RISKS AND UNCERTAINTIES THAT COULD MATERIALLY AFFECT ACTUAL RESULTS. THE COMPANY DISCLAIMS ANY OBLIGATIONS TO UPDATE ANY FORWARD-LOOKING STATEMENT AS A RESULT OF DEVELOPMENTS OCCURRING AFTER THE DATE OF THIS PRESS RELEASE.

###

Contacts:

For: Enzo Biochem, Inc.

Steve Anreder, 212-532-3232 or Michael Wachs, CEOcast, Inc., 212-732-4300