## FORM 4

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

OMB APPROVAL
OMB Number: 3235-0287
Estimated average burden
hours per response... 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

#### STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

(Print or Ty	pe Response	s)														
1. Name and Address of Reporting Person * KRENITSKY KEVIN					2. Issuer Name and Ticker or Trading Symbol ENZO BIOCHEM INC [ENZ]							5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner				
(Last) (First) (Middle) C/O ENZO BIOCHEM, INC., 527 MADISON AVENUE					3. Date of Earliest Transaction (Month/Day/Year) 01/29/2010							X Officer (give title below) Other (specify below) President, Enzo Clinical Labs				
(Street) NEW YORK, NY 10022					4. If Amendment, Date Original Filed(Month/Day/Year)							6. Individual or Joint/Group Filing(Check Applicable Line)  Form filed by One Reporting Person Form filed by More than One Reporting Person				
(City) (State) (Zip)				Table I - Non-Derivative Securities Acqui							ired, Disposed of, or Beneficially Owned					
(Instr. 3)			2. Trans Date (Month	/Day/Year) E	Execu any	•	Code (Instr. 8) (I		(A) or	rities Acq Disposed (3, 4 and 5)	of (D)	Reported Transaction(s)			Ownership Form:	7. Nature of Indirect Beneficial
			(Month/Day/Year)		Code	V	Amour	(A) or (D)	Price	(Instr. 3 and 4)				Ownership (Instr. 4)		
Common Stock, par value \$0.01		01/29/	2010	10		A		6,000	A	<u>(1)</u>	17,600		D			
							ies Acquir	ed, Di	sposed (	of, or Ben	eficial	•	OMB cont	rol numbe	r.	
	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/	n 3A Ex	A. Deemed Execution Date	e.g., pu	uts, calls, wa 4. Fransaction Code (Instr. 8)	arrants, op 5.	(Month/Day/Yea curities equired ) or sposed			7. Ta Amo Und Secu			Owners Form of Derivati Security Direct ( or Indire	(Instr. 4)	
							(Instr. 3, 4, and 5)  (A) (D)	Date Exer		Expiration Date	n Title	Amount or Number of Shares				
Repor	ting O	wners			,											
D	O N	/ A 3 3				Relationsh	ips									
Reporting Owner Name / Address			Director	10% Owner	Officer					Other						

President, Enzo Clinical Labs

## **Signatures**

KRENITSKY KEVIN C/O ENZO BIOCHEM, INC.

527 MADISON AVENUE NEW YORK, NY 10022

/s/ Kevin Krenitsky	02/02/2010				
**Signature of Reporting Person	Date				

### **Explanation of Responses:**

- \* If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) The Reporting Person was granted 6,000 shares of restricted common stock, par value \$0.01 per share, of the Company on January 29, 2010 in connection with his service as an officer of the Company. The shares will vest in three equal annual installments, beginning on January 29, 2011.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.