FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

OMB Number: 3235-0287

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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

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

1. Name and Address of Reporting Person* GREGORY JULIA P					2. Issuer Name and Ticker or Trading Symbol LEXICON GENETICS INC/TX [LEXG]						(Ch	5. Relationship of Re (Check all applicable Director X Officer (give		10% C	wner (specify	
(Last) (First) (Middle) 8800 TECHNOLOGY FOREST PLACE				3. Date of Earliest Transaction (Month/Day/Year) 02/13/2007							EVP, Corp Dev and CFO					
(Street) THE WOODL (City)			773811160 (Zip)	4.	If Ame	endment, [Date of	f Original Fil	ed (M	lonth/Da	y/Year)	Line) <mark>X</mark> Form fil	ed by One F	iling (Check Ap Reporting Perso than One Repo	on
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																
1. Title of Security (Instr. 3) 2. Transal Date (Month/D			ransactio	action 2A. Deemed Execution Date,		3. Transact Code (In:	ransaction Disposed Of (D) (Instr. 3, 4 ode (Instr.		ed (A) or	5. Amount of Securities Beneficially Owned Following Reported		6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)			
								Code	/ 4	Amount	(A) o (D)	Price	Transacti (Instr. 3 a			(111511.4)
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																
1. Title of Derivative Security (Instr. 3)	Conversion Date Execution Exercise (Month/Day/Year) if any		3A. Deemed Execution Date, if any (Month/Day/Year)	Code (Instr.		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s)	Ownershi Form: Direct (D) or Indirec (I) (Instr. 4	Beneficial Ownership t (Instr. 4)	
				Code	v	(A)		Date Exercisable	Exp Date	oiration e	Title	Amount or Number of Shares		(Instr. 4)	1(5)	
Employee Stock Option (right to buy)	\$3.94	02/13/2007		A		100,000		(1)	02/1	13/2017	Common Stock	100,000	\$0	100,000	D	

Explanation of Responses:

1. Option vests with respect to 25% of the shares subject to the option on the first anniversary of grant (2/13/2008) and vests 1/48th per month for each month of service thereafter.

Remarks:

/s/ Gregory, Julia P.

02/15/2007

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * 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).

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

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