FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

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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]								5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner V Officer (give title Other (specify				
(Last) (First) (Middle) 8800 TECHNOLOGY FOREST PLACE						of Earl 2004	iest Transa	ction (Mo	onth/D	ay/Year)		X Officer (give title Other (specify below) EVP, Corp Dev and CFO						
(Street)		4. If Amendment, Date of Original Filed (Month/Day/Year)								6. Individual or Joint/Group Filing (Check Applicable Line)								
THE WOODLANDS TX 773811160												X Form filed by One Reporting Person Form filed by More than One Reporting						
(City)	(S	tate)	(Zip)										Persoi	n				
		Tab	le I - Non	-Deriva	tive S	ecuri	ties Acq	uired,	Disp	osed of	or Ber	eficial	ly Owned	t				
1. Title of Security (Instr. 3)				2. Transaction Date (Month/Day/Year)		2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)					d Securiti Benefici Owned	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	v	Amount	(A) or (D)	Price	Transac (Instr. 3	tion(s)		(iiisti. 4)		
Common	Stock			05/03/	/2004			M		30,000	A	\$2.5	5 98	,400	D			
Common	Stock			05/03/	/2004			S		3,160	D	\$7.0	6 95	,240	D			
Common	Stock			05/03/	/2004			S		200	D	\$7.0	7 95	,040	D			
Common	Stock			05/03/	/2004			S		800	D	\$7.0	9 94	,240	D			
Common	Stock			05/03/	/2004			S		7,820	D	\$7.	1 86	,420	D			
Common	Stock			05/03/	/2004			S		4,523	D	\$7.1	1 81	,897	D			
Common	Stock			05/03/	/2004			S		2,497	D	\$7.1	2 79	,400	D			
Common	Stock			05/03/	/2004			S		3,000	D	\$7.1	3 76	,400	D			
Common	Stock			05/03/	/2004			S		3,100	D	\$7.1	4 73	,300	D			
Common	Stock			05/03/	/2004			S		2,817	D	\$7.1	5 70	,483	D			
Common	Stock			05/03/	/2004			S		1,200	D	\$7.1	6 69	,283	D			
Common	Stock			05/03/	/2004			S		500	D	\$7.1	9 68	,783	D			
Common	Stock			05/03/	/2004			S		3,483	D	\$7.2	2 65	,300	D			
Common	Stock			05/03/	/2004			S		104	D	\$7.2	1 65	,196	D			
Common Stock					/2004			S	S		900 D		2 64	64,296				
Common Stock 05				05/03/	/2004			S		1,503	D	\$7.2	4 62	2,793	D			
Common Stock 05/0					/2004			S		393	D	\$7.2	5 62	,400	D			
Common Stock													6,	647	I	By Family Trusts for Minor Children		
		-	Fable II - I							sed of, onvertible			Owned					
1. Title of Derivative Security (Instr. 3)	le of 2. 3. Transaction 3A. Deemer Execution I or Exercise (Month/Day/Year) if any		Pate, Tr CYear) 8)	ansaction	5. Number of E C C C C C C C C C C C C C C C C C C		5. Date Ex Expiration Month/Da	ercisa n Date ny/Yea	xpiration	7. Title and Amo of Securities Underlying Derivative Secu (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Numbe derivative Securities Beneficial Owned Following Reported Transactie (Instr. 4)	Ownersh Form: Direct (D or Indire (I) (Instr.	Beneficial Ownership ct (Instr. 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)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8) 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			vative urities uired or oosed O) (Instr.	6. Date Exerc Expiration Da (Month/Day/\)	ate	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) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Employee Stock Option (right to buy)	\$2.5	05/03/2004		М			30,000	(1)	02/08/2010	Common Stock	30,000	\$0	435,000	D	

Explanation of Responses:

 $1. \ Option \ vests \ with \ respect \ to \ 1/48 th \ of \ the \ shares \ subject \ to \ the \ option \ for \ each \ month \ of \ service \ following \ the \ date \ of \ grant \ (2/8/2000).$

Remarks:

05/05/2004 /s/ Gregory, Julia P.

** Signature of Reporting Person

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.