Instruction 1(b).

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

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* ISHIMOTO LANCE K						2. Issuer Name and Ticker or Trading Symbol LEXICON GENETICS INC/TX [LEXG]								cable) or (give title	ig Pers	10% Ow Other (s below)	ner
(Last) (First) (Middle) 8800 TECHNOLOGY FOREST PLACE					3. Date of Earliest Transaction (Month/Day/Year) 02/13/2007								below)	SVP, Intellectual Pro			
(Street) THE TX 773811160 WOODLANDS			4.	4. If Amendment, Date of Original Filed (Month/Day/Year)								Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person					
(City) (State) (Zip)			(Zip)														
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																	
1. Title of Security (Instr. 3) 2. Transa Date (Month/D					ear)	A. Deemed Execution Date, f any Month/Day/Year)		Transaction Dispose Code (Instr. 5)		ities Acquired (A) or d Of (D) (Instr. 3, 4 a		Benefici	es ally Following	Form	: Direct r Indirect str. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)	
							Code	,	Amount	(A) or (D)	Price	Transac (Instr. 3	tion(s)				
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		3A. Deemed Execution Date, if any (Month/Day/Year)	Code (Inst				6. Date Exercis Expiration Dat (Month/Day/Ye			7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number derivative Securities Beneficia Owned Following Reported Transacti (Instr. 4)	e s Illy	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Expiration Date Date Title Shares									
Employee Stock Option (right to buy)	\$3.94	02/13/2007		A		40,000		(1)	02	2/13/2017	Common Stock	40,000	\$0	40,00	0	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/ Ishimoto, Lance K.

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.