

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

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* <u>BROWN PHILIP M</u> (Last) (First) (Middle) <u>8800 TECHNOLOGY FOREST PLACE</u> (Street) <u>THE WOODLANDS TX 773811160</u> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) <u>02/13/2007</u>	3. Issuer Name and Ticker or Trading Symbol <u>LEXICON GENETICS INC/TX [LEXG]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>VP Clinical Development</u>	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
<u>Common Stock</u>	<u>3,000</u>	<u>D</u>	

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
<u>Employee Stock Option (right to buy)</u>	<u>(1)</u>	<u>04/21/2013</u>	<u>Common Stock</u>	<u>50,000</u>	<u>4.16</u>	<u>D</u>	
<u>Employee Stock Option (right to buy)</u>	<u>(2)</u>	<u>02/18/2015</u>	<u>Common Stock</u>	<u>30,000</u>	<u>5.76</u>	<u>D</u>	
<u>Employee Stock Option (right to buy)</u>	<u>(3)</u>	<u>02/01/2016</u>	<u>Common Stock</u>	<u>40,000</u>	<u>4</u>	<u>D</u>	
<u>Employee Stock Option (right to buy)</u>	<u>(4)</u>	<u>02/13/2017</u>	<u>Common Stock</u>	<u>50,000</u>	<u>3.94</u>	<u>D</u>	

Explanation of Responses:

- Option vests with respect to 25% of the shares subject to the option on the first anniversary of grant (4/21/2004) and vests 1/48th per month for each month of service thereafter.
- Option vests with respect to 25% of the shares subject to the option on the first anniversary of grant (2/18/2006) and vests 1/48th per month for each month of service thereafter.
- Option vests with respect to 25% of the shares subject to the option on the first anniversary of grant (2/1/2007) and vests 1/48th per month for each month of service thereafter.
- 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/ Brown, Philip M. 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 5 (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.