

# FORM 4

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

OMB APPROVAL  
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## 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

1. Name and Address of Reporting Person *		2. Issuer Name and Ticker or Trading Symbol		5. Relationship of Reporting Person(s) to Issuer (Check all applicable)	
<b>MacFarlane Katie</b>		<b>RespireRx Pharmaceuticals Inc. [ RSPI ]</b>		<input checked="" type="checkbox"/> Director <span style="float:right">_____ 10% Owner</span> <input type="checkbox"/> Officer (give title below) <span style="float:right">_____ Other (specify below)</span>	
(Last) (First) (Middle)		3. Date of Earliest Transaction (MM/DD/YYYY)			
<b>C/O RESPIRERX PHARMACEUTICALS INC., 126 VALLEY ROAD, SUITE C</b>		<b>3/31/2016</b>			
(Street)		4. If Amendment, Date Original Filed (MM/DD/YYYY)		6. Individual or Joint/Group Filing (Check Applicable Line)	
<b>GLEN ROCK, NJ 07452</b>				<input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person	
(City) (State) (Zip)					

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Trans. Date	2A. Deemed Execution Date, if any	3. Trans. Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	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			

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

1. Title of Derivate Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Trans. Date	3A. Deemed Execution Date, if any	4. Trans. Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date		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 of Derivative Security: 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				
Common Stock Options (to purchase shares of Common Stock)	\$0.0227	3/31/2016		A		10000000		(1)	3/31/2021	Common Stock	10000000	\$0	10000000	D	
Common Stock Options (to purchase shares of Common Stock)	\$0.0197							(2)	8/18/2022	Common Stock	3000000		3000000	D	
Common Stock Options (to purchase shares of Common Stock)	\$0.025							(3)	6/30/2022	Common Stock	2000000		2000000	D	

### Explanation of Responses:

( These Common Stock Options vest in four equal installments: 25 percent on March 31, 2016 (the grant date), 25 percent on June 30, 2016, 25 percent on 1) September 30, 2016, and 25 percent on December 31, 2016.

( These Common Stock Options vest in four equal installments: 25 percent on December 31, 2015, 25 percent on March 31, 2016, 25 percent on June 30, 2016, 2) and 25 percent on September 30, 2016.

( The Common Stock Options vest in three installments: 50 percent on June 30, 2015, 25 percent on September 30, 2015, and 25 percent on December 31, 3) 2015.

### Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
<b>MacFarlane Katie</b> <b>C/O RESPIRERX PHARMACEUTICALS INC.</b> <b>126 VALLEY ROAD, SUITE C</b> <b>GLEN ROCK, NJ 07452</b>	<b>X</b>			

**Signatures**

/s/ Kathryn MacFarlane

4/4/2016

—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.

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